HIV/AIDS AWARENESS PROGRAMMES ON BEHAVIOR CHANGE AMONG THE YOUTH IN PUBLIC SECONDARY SCHOOLS IN MBITA , HOMABAY COUNTY, KENYA

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DECLARATION

This research project report is my own original work and has not been presented for an award in any University.

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This research project report has been submitted for examination with our approval as the University Supervisors.

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DEDICATION

I would like to dedicate this research project to my son, the Almighty Lord and my family.

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I have to acknowledge the works of my supervisors Dr. Stephen Lucas Okelo and Mr. Joseph Awino who have offered their time and given me incredible guidance and professional counsel to enrich the content of this research. I wish also to extend my appreciation to University of Nairobi department of extramural studies and my colleagues.

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LIST OF ABBREVIATIONS AND ACRONYMS USED IN THE STUDY

ABC	-	Abstinence Be Faithful & Condoms
AIDS	-	Acquired Immune Deficiency Syndrome
BCC	-	Behavior change Communication
CDC	-	Centre for diseases control and prevention
		Diseases
HBCT	-	Home Based HIV counseling and testing
HIV	-	Human Immune Virus
HIV/AIDS	-	Human Immunodeficiency Virus/Acquired immunodeficiency
IBM	-	Motivation Behavior Skill
KAIS	-	Kenya Aids Indicator Survey
KDHS	-	Kenya Demographic and Health Survey
MOE	-	Ministry of Education
MOH	-	Ministry of Health
NACC	-	National AIDS Control council
STI	-	Sexually Transmitted Infections
UNAIDS	-	United Nations Agency for International Development
UNFPA	-	United Nations population fund
UNGASS	-	United Nations General Assembly Special Session
USA	-	United States of America
VCT	-	Voluntary counseling and Testing
WHO	-	World Health Organization

ABSTRACT

This research study titled, HIV/Aids awareness programs on behavior change among youth in public secondary schools, was conducted in Mbita Sub-County, Homabay County in Kenya. It was intended to examine HIV/Aids awareness programs and influence of behavior change among youth in public secondary schools within Mbita. Despite several interventions which have shown a reduction in the national, regional and global statistics of HIV/Aids infection, the rate of new HIV infections among adolescents has been increasing in Kenya. The objectives are to examine the influence of counseling and testing programs on behavior change among youths in public secondary schools in Mbita sub-county. Determine the influence of youth promotion programs on behavior change among youth in public secondary schools in Mbita Sub-county, evaluate the influence of health education programs on behavior change among youth in public secondary schools in Mbita Sub-county and assess how parental support programs influence behavior change among youth in public secondary schools in Mbita Sub-county. The study used a mixed method project design where both qualitative and quantitative research techniques were used. Slowball technique was used to identify representative samples of students in each of the six schools where HIV/Aids programs existed with a target population of 348 respondents. Questionnaires and interview schedule were the main research instruments in the study. The respondents voluntarily participated in the interview, where research tools were administered to each independently. The results showed that there was no significant difference in response in gender, type of school and family type. The results also showed that counseling and testing had a weak positive relationship to delaying sexual debut among secondary school-going adolescents in Mbita Sub-County whereas r = 0.045 and n= 275 and p> 0.05 p= 0.457 indicating lack of statistical significance between the variables. Equally, the study found that there was no statistical significance between youth promotion programs and the study outcome variable r= 0.022 and n= 275 and p> 0.05 p= 0.715. The study also found negative association between health education programs and outcome variable r= - 0.018, n = 275 and p> 0.05, p= 0.766. However, the study found a positive strong association between parental support programs and delaying sexual debut r= 0.634 and n= 275 and p < 0.05 p= 0.027. It can be concluded that parental support programs through advice, role modeling, parental guidance, and empowerments should be well anchored and strengthened at a family level within the society. The research recommends that another study of wider geographical scope be conducted to validate the findings of this research, adolescents need to be trained on safe sex and partner reductions. On youth promotion programs, the study recommends the selective use of youth-friendly programs, and on parental support programs, this study recommends that behavior change programs should center on parents empowerment and support to reinforce positive behavior among the youth

CHAPTER ONE

1.0 Introduction

This Chapter covers the background of the study where various case examples such HIV/Aids programs in Malaysia, Japan, Sub-Saharan Africa, south Africa, Nigeria, Rwanda, Uganda and Kenya have been explored. It also entails the statement of the problem, purpose of the study, research objectives, research questions, significance of the study, basic assumptions, limitations of the study and delimitations.

1.1 Background of the Study

Every day more than 5,000 young people aged between 15–24 years old contracts HIV globally. This is equivalent to the population of adults who also get infected every day despite that adolescents represent less than 25 percent of the world population. The global estimates indicate that over the age group 15-24 years are at most risks in Sub-Saharan Africa (World Bank, 2007). A similar report has found that in Eastern Europe and Asia about 80 percent of those with HIV/Aids are under 30 years. Equally, in Latin America, the new studies reveal that Aids new infections are fast shifting to younger populations. Center for Disease Control (CDC) (2015) did a survey on the global trends of HIV/Aids infection. The findings established that there had been a persistent dramatic increase in adolescent's female's premarital sexual intercourse activities. The study also found that one in every six young adolescents had experienced sexual intercourse with more than three different partners at the age of 15 years.

Since HIV first appeared in 1986 from that time, the majority of infection are within transgender (TG), injecting drug users, homosexuals and sex workers (SW). At the close of 2012, Malaysia had an estimate of 81,900 people living with HIV/Aids (PLHIV) from

the time the first case was diagnosed 27 years ago. Equally, in Japan, the trend of HIV/Aids infections rate has been rather low and going down. Until 2014, 16903 cases of infection had been reported. In addition, 1,439 cases were identified to be infected with HIV through contaminated blood products used in the treatment of hemophilia in the 1980s. The WHO (2014) report found that the majority of infections are among high-risk populations among injecting drug users, homosexual contact accounts for 57.3% of all cases of HIV infection and 38.7% of AIDS cases, while heterosexual contact accounts for 27.2% and 35.7%, respectively. Infections through injecting drug use or mother-to-child transmission are few, both accounting for less than 1% among all cases of HIV infection and AIDS reported to date. The states in Japan with high prevalence rates include Tokyo, Kanto-Koshinetsu Tokai, and Kinki areas. A survey conducted Sub- Saharan Africa by CDC (2014) found that only 20 percent of adolescents were using condoms during sex leaving 80 percent having unsafe sexual practices (Rao Gupta et al., 2008).

In Sub-Saharan Africa close to 450,000 children died from AIDS-related illnesses in 2004. The same period 560,000 were infected across the region and according to UNAIDS (2007) close to 1.9 million children are living with HIV/Aids across Sub Saharan Africa. UNAIDS (2007) further highlights that the region has an estimated prevalence of death rates among children which is higher than anywhere else in the world. In Sub-Saharan Africa, the percentage of male 15– 19-year-olds reporting condom use at their last sexual intercourse with a non-marital partner in several countries is around 20% lower than for 20– 24-year-olds (Rao Gupta et al., 2008). In Sub-Saharan Africa alone, an estimated 450,000 children died from AIDS in 2004. Furthermore, an estimated 560,000 children were newly infected, and an estimated 1.9 million children are living with HIV/AIDS as of

the end of 2004 (UNAIDS, 2007). A UNAIDS (2007) report reveals that in the Sub-Saharan African region, the estimated prevalence and death rates among children are drastically higher than anywhere else in the world.

According to UNAIDS (2018), Nigeria is the leading Sub-Saharan African nation with highest people affected with HIV/Aids and second only in the entire world. The rate of new infection in Nigeria is among the highest. Several factors are making it difficult for effective management of disease in Nigeria. There is a lack of government goodwill to fight the disease, counseling and testing centers are few to meet the demands of the more significant population, low unawareness levels among the people,

Several factors are making it difficult to manage and control the new infections in Nigeria effectively. Counseling and testing centers are few to meet the demands of the more significant population, careless sex practices, low levels of access to retroviral drugs to suppress the viral load. The government is also blamed of encouraging punitive laws making it difficult for those who practice heterosexual behaviors to access medical facilities. At the end of 2016, the report from WHO found that about 3.6 million are living with HIV/Aid in Nigeria. Among the states in Nigeria with the highest level of prevalent rate include Kaduna, Akwa Ibom, Lagos, Oyo, and Kano. However, the rate of infection in rural areas stand at 4 percent while that one of the urban areas stands at 3 percent.

The situation in Rwanda has a stable prevalent rate. This has been maintained at low levels due to the government efforts. However, according to the Demographic Health Survey (2015), the prevalence rate in rural areas is at 2 percent while urban areas are at 6 percent. The survey also found a similar pattern of those at high risk who happen to be sex

workers, those using drugs and track drivers. However, in Rwanda UNAIDS (2016) found that 95.1 percent of sex workers know their HIV/Aids status. However, prevalence among homosexuals is at 83 percent whereas knowledge about HIV/Aids 71.4 percent.

In the year 2013, Rwanda reported increased voluntary counseling and testing from a rate of 15 centers in the year 2001 to 493 at the close of 2013. There has also been increased usage of prevention of mother to child transmission (PMTCT) to the extent that nearly 97 percent of all health facilities in Rwanda are offering PMTCT services in the entire country. In the year 2014, a survey was conducted to establish prevalence among male circumcision, the report found that the prevalence was at 30 percent among those who were aged 15-49 years, and this hastened the government effort to support voluntary male circumcision budget allocation in the strategic health plan of 2013 to 2018 of HIV/Aids. The government increased accountability and transparency and a good representation of women on leadership increased donor confidence in the governance of the nation, and this resulted into increased external funding for HIV/Aids US$216.8 million (92.4% of total HIV/AIDS spending). Studies, however, have established that HIV/Aids among sex workers have been on the declining trend, in 2010 it was at 51 percent, and in 2016 it dropped to 45.8 percent. Though higher rate in women at 3.8 percent as opposed to men at 2.3 percent due to women biological makeup on their genital tract.

Overall prevalence HIV/Aids infection in Uganda has been on the declining trend reports compared from 2011 and 2016, a move from 7.3 percent to 6 percent. The UPHIA survey reported a decline in men and women in equal measure. Among 60 percent who are positive, there has also been increased suppression of viral load indicating positive

treatment impact. Among the gaps facing Uganda include, prevalence among young adolescents 15-19 years has increased from 1.1 percent in 2011 to 3.3 percent in 2016. Secondly, there is also an increased infection rate among those aged between 20-24 years. The third gap still facing Uganda is the viral suppression load among those aged 15-24 years is still below 50 percent

KAIS, (2007) stipulates that HIV/AIDS remains a significant challenge in Kenya. According to this report, there are high regional variations in HIV infection rates, low level of HIV testing and increasing cases of HIV discordance among couples. The report further points out that ignoring the epidemic of sexually transmitted disease (STI) are essential challenges in the control and management of HIV in Kenya despite government's strategies to migrate the impact of HIV/AIDS.

Despite no clear reports in district prevalence in the Kenya Demographic Health Survey (KDHS), 2009 report, in Mbita Sub-County the prevalence stands at 26% in 2011 (MoH, 2011). This is far above both provincial and national prevalence which stands at 13.4 % and 6.3 respectively (KDHS, 2009). In Kenya, recent studies show that young people of 12 to 30 years of age constitute the biggest proportion of the county's population. The uninfected young people are regarded as a window of hope in fighting the epidemic.

Most of this youth especially girls are at higher risk of getting infected with HIV, due to an earlier age at first sex, estimated at 15.6 years for girls and 17.6 years for boys (KDHS, 2008-2009). The same study shows that 3 percent of youth age 15-24 are HIV-positive. Young women age 15-24 are more vulnerable to HIV infection than men of the same age. The results indicate that women of this age group are four times more likely to be HIV

positive than men (almost 5 percent and 1 percent, respectively). HIV prevalence increases with age, from less than 2 percent among youth age 15-17 to almost 6 percent among those ages 23-24. The absolute increase by age is more apparent for young women than men; 8 percent of women age 23-24 have HIV (KDHS, 2008).

Another interesting revelation of the study indicates that among a small number of young people who are either divorced or separated, or widowed have a much higher HIV prevalence (22 percent) than those who are married or living together with their partner (6 percent). Youth who have never married have the lowest incidence (2 percent). Among the never-married youth, those who report that they have ever had sex have a higher prevalence than those who report that they have never had sex (2 and 1 percent, respectively). Nyanza province has the highest HIV prevalence among youth (8 percent), followed by Nairobi (3 percent), and Central, North Eastern, and Coast provinces have the lowest prevalence at 1 percent each. As in the general population, Nyanza has the highest prevalence for both young women and men (11 and 3 percent, respectively) KDHS, 2008-2009.

Sexual behavior change has been recognized by scholars and researchers as the most effective way of preventing HIV/Aids transmission among a majority of high risks population across the world. Some behavior change theories that recognize the complexity of human behavior and other structural factors have been developed. Some of these theories include AIDS Risk Reduction Model (ARRM), Health Belief Model, and Stages of Change. These models are of great importance in the development of HIV/AIDS programs (Family Health International, 2002). In essence, there is a need to gather information on the basic knowledge that young people have on HIV/AIDS and their sexual

practices, and use these to develop appropriate preventive strategies using a behavior theory as a fundamental framework.

1.2 Statements of the Problem

The global trend of HIV/Aids infection rate has been declining in both developed and developing nations. This decline in infection rate is not even throughout the nations with the developed nation taking a better lead. According to National Aids control Council report (2015), HIV/Aids infection rate in the country is on the downward trends as awareness, education and campaign that has been conducted over several years begin to bear fruit.

Despite the downward trend, in Mbita constituency the infection rate has been rising. Past studies done in the area have established that cultural practices like fish for sex, lack of parental support making young girls vulnerable to the old men with money (Odida, (2012). According to KDHS Nyanza province has been leading in prevalence rate and among the shores of the lake are hard hit. Early sex by the youth is one-factor studies have blamed on the increasingly prevalent rate in the area. However, there are many NGOs in Nyanza all working together to ensure that the infection rate can be reduced to match the global decreasing tread. According to the National Council of HIV/Aids control, a lot of funds have been channeled in HIV/Aids program in Nyanza, but the infection rate continues to increase. Given the above background, there is need to find out the role HIV/AIDs awareness, counseling and testing, provision of funds and health education on behavior change to develop a model which can be relied on to reduce the HIV/Aids among the adolescents in Mbita sub-County Homabay County, Kenya.

1.3 Purpose of the Study

The purpose of this study was to examine HIV/AIDs awareness programs and the influence of behavior change among youths in public Secondary schools in Mbita Sub-County.

1.4 Objectives of the Study

The study explored the following objectives;

i. To examine the influence of counselling and testing programs on behavior change among youths in public secondary schools in Mbita Sub County, Kenya
ii. To determine the influence of youth promotion programs on behavioral change among youths in public secondary schools in Mbita Sub- County Kenya
iii. To evaluate the influence of health education programs on behavior change among youths in public secondary schools in Mbita Sub-County, Kenya
iv. To assess how parental support programs influence behavior change among youths in public secondary schools in Mbita Sub-County, Kenya.

1.5 Research Questions

The study answered the following research questions.

i. How does counselling and testing programs influence behavioral change among youths in public secondary schools in Mbita Sub- County Kenya?
ii. How does youth promotion programs influence behavioral change in public secondary schools in Mbita Sub- County, Kenya?
iii. How does health education programs influence behavior change in public Secondary schools in Mbita Sub-County, Kenya?

iv. How does parental support programs influence behavior change among youth in public secondary schools in Mbita Sub-County in Kenya?

1.6 The Significance of the Study

This study would help unearth issues that youth's face which contributes against the fight to eradicate HIV/AIDS in Kenya. The study would help Government, Non-Governmental Organizations, researchers and communities implementing various youth programs on HIV/AIDS develop youth-friendly services. It's also envisaged that recommendations of this study would contribute significantly in developing policies that shall help Kenya achieve its broad objective of HIV free generation since it is targeting the future generation.

1.7 Basic Assumptions of the Study

The following assumptions were made in this study; that the respondents were able to voluntarily provide accurate information; the relevant authorities were to provide adequate support to the researcher. It was also assumed that the research assistants fully understood the questionnaire and to ensure ease of administering and reach all respondents in time and capture all required information.

1.8 Limitations of the Study

This study only focused on Influence of HIV/AIDS Awareness programs on Behavior Change to the Youth in public secondary Schools in Mbita Sub-county, Homabay County, and the findings, therefore, may not be able to provide generalization regarding all schools in Kenya or Africa.

The second limitation the researcher envisions was about bias in sampling procedure. Stratified random sampling has an inherent challenge in accurately sorting each member

of sub population, and this makes the sampling method an effective in collecting data from secondary schools pupils. Even though, the significant amount of responses is expected through intensive follows ups, the assumptions of the central limit theorem (Berenson, 2002) may not be obtained, and therefore the assumptions about the normal distribution of the sample might be arguable. Therefore, basing on statistical principals, it might be doubtful to generalize findings of this research to extend of other counties within Kenya and Africa as a whole. Third, the sample cannot precisely describe all the features of the entire population. Fourth, there is always a probability to receive 'uninformed response' (Saunders, 2000) attributed to cases either the students are unwilling to disclose their private information or fear of ridicule if discovered by their peers.

1.9 Delimitation of the Study

The study was carried out in six public secondary schools in Mbita District, Homabay County. The schools were Mbita High School, Waondo Mixed Secondary School, Kakiimba Secondary School, Wasamo Girls Secondary School, Wakula Mixed Secondary School and Sena Secondary School. The schools were randomly chosen out from the entire lists of all schools in Mbita Districts. A representative sample of each class were included in the study to be able to make deductions from the generalized findings. The choice of the schools was based on those schools had different clubs including peer counselling and guidance in the schools as well as they were involved actively in games.

1.10 Definition of Significant Terms Used in the Study

HIV/Aids Awareness programs: These are set of activities, services, products and systems set up within the environments that are safe and accessible by the youth to acquire knowledge on causes and effects of HIV/Aids.

Behavior Change among the youth: Health behavior change refers to the motivational, volitional, and actionable processes of abandoning such health-compromising behaviors in favor of adopting and maintaining health-enhancing behaviors

HIV/AIDS: Human Immunodeficiency Virus and Acquired Immune Deficiency Syndrome.

Youth Promotion Programs: These are set of activities, services, and products primarily targeting the well-being of youth.

Public Secondary Schools: These are schools offering post primary curriculum running for four years and are managed and financed by the Government of Kenya.

Counselling and testing: The service rendered to an individual in order for him/her to know his HIV status, which

could be either positive or negative and is usually confidential.

Health education programs: Any combination of learning experiences designed to help individuals and communities improve their health, by increasing their knowledge or influencing their attitudes.

Parental Support programs: These are services rendered by parents to help children live with or maintain positive relationships with their parents, family members, and entire community with view to protect them from alternative harmful practices.

Youths: Is someone aged between 15-30 years according to the Kenyan government? However, this research consider youths between 13-20years as the prime target.

1.11 Organization of the Study

The study comprise five chapters. Chapter one contains background to the study, statement of the problem, the purpose of the study, objectives of the study, research question, significance of the study, limitation of the study, delimitation of the study and definition of significant terms used in the study. Chapter two comprises review of related literature divided into; the concept of behavior change, HIV/Aids awareness, Counselling and testing programs and behavior change, health education and behavior change, parental support programs and behavior change, research gaps, theoretical framework and conceptual framework. Chapter three is composed of research methodology; introduction, research design, target population, sample size and sampling procedure, research instruments, pilot study, reliability of the instruments, validity of the instruments, data analysis techniques, ethical consideration and operationalization of variables. Chapter four consists of the data analysis detailing how data has been presented and discussed. Chapter five contains summary of the findings, conclusion and recommendation for further studies.

CHAPTER TWO

LITERATURE REVIEW

2.1 Introduction

This chapter shall review literature based on the following topics and sub-topics on behavior change among the youth. The review is based on research objectives. It will also highlight the study gaps and summary of the review.

2.1.1 Behavior Change among youths

Behavior change communication (BCC) is said to be an interactive process with the youth who are at risk and those likely to be at risk of contracting HIV/Aids (Padian et al., 2008). It is meant to develop tailored messages and unique approaches by use of a variety of different communication channels so as to develop positive behavior change and to enhance the youth in developing appropriate behavior (Stoneburner & Low-Beer, 2004). In the context of HIV/AIDS, behavior change is an essential part of a comprehensive program which includes medical, social and psychological and spiritual guidance to patients. Behavior change program is based on the tenet knowledge is power to risk reduction and the adoption of safe sex practices (Jaffe, Valdiserri, De Cock, 2007). The people also need to perceive that environment is supporting them to live responsibly.

2.1.2 HIV/AIDS Awareness programs

Anyamene et al. (2011) carried out a study on the influence of knowledge on HIV/AIDS on behavior change among adolescents among Anambra States, Nigeria. The findings established that half of the respondents were aware of VCT, 197 (58.8%), on free condoms,

87 (26%) and wellness program 26 (7.8%), however, only 2.3% of respondents were aware of peer education program and only 1.2 % were informed of ART influence on behavioral change . A chi-square test, however, revealed that awareness and utilization of HIV/AIDS prevention methods shown a statistically significant difference between knowledge and HIV/AIDS the χ 2 value was 5.838, with p-value .047. There was a strong association between awareness and HIV/AIDS prevention methods utilization. The degree of agreement between these two variables was also high (98.3%). However, this study never established why despite knowledge the prevalence rate was still high among school going youths.

Wambua (2000) conducted a study to establish how knowledge within the church going youths in Machakos District influenced the decision to avoid premarital sex. He found that up to 80.7% of the youth were aware that they could easily prevent pregnancy and HIV/Aids through abstinence and the youth admitted being sexually active and only 19.7% indicated using condoms to prevent pregnancies. However, 30.5% indicated that they have been abstaining as a requirement of the church and since it is a moral duty and not to disappoint the parents who have invested in them.

2.2 Counselling and Testing program and Behavior Change

HIV/Aids counseling can be defined as the relationship between counselor and client for the sole reason of risk reduction and assisting the clients to cope and deal with emotional issues. The overall goal of client-centered HIV/Aids counseling is to be able to conduct an individualized risk assessment and help patients develop a risk reduction plan (KDHS,

2009). Past studies, however, have noted that evaluation of the effectiveness of counseling has not been effective across developed and developing nations since there is lack of adequate outcome measurement instruments. Moreover, parallel studies have established that counseling interventions are most effective when accompanied by access to skill building, appropriate condom usage, the use of clean syringes, and development of peer groups and community norms that promote morality of human actions (Wambua, 2012).

According to the CDC report (2014) researchers have found that client-centered counseling has a significant role in controlling behaviors of youths not to engage in irresponsible sexual practices. Counseling of adolescent in schools is effective when divided into exploring their feelings about sexual behaviors and perhaps using existing knowledge as a tool to engage with them on addressing barriers about safe sex and paying particular attention to negative behaviors that inhibit adoption of safe sex (Sawires et al., 2007). UNAIDS (2016) researchers surveyed to establish adolescence receptiveness to testing and counseling programs.

The results found that majority of adolescents do go for testing and counseling on HIV/Aids since they say what they do not know do not affect them, and this could be number one factor for casual sex among adolescents and the increased rate of infection among 15-24 years in Africa. The results found that only 10 percent of boys and 12 percent of girls had done counseling and testing for their HIV/Aids over the last 12 months. However, counseling and testing has been found to be an effective means for adolescents to change their behavior.

Rosenberg et al. (2013) while assessing the effectiveness of HIV/Aids counseling programs among South African Youths found that testing and counseling resulted to 41 percent of fewer cases of new infections among the youths in a period of four years. This only underscores the importance of adolescence testing and counseling as a preventive measure. However, according to KAIS (2007) established that to increase the rate of testing and counseling among the youths would only be possible by increasing access to youth-friendly programs supporting testing and counseling as a method for regulating sexual behaviors among the youths.

Zanoni et al. (2016) conducted a study on a systematic review of the adolescent HIV continuum of care among 867283 HIV infected youths in South Africa during the year 2013. The results found that despite a large number of several antiretroviral therapies (ART) programs in South Africa only 14 percent of the youth had testing for their HIV/Aids leaving 86 percent not concern or fear of testing and attending counseling programs. Another study by Noar, Chabot, Zimmerman (2008) also established that among those who attended counseling programs were twice likely to testing and know their status and henceforth leave and engage in safer sex behaviors.

World Health Organization (2013) published a report on the guidance for HIV/Aids testing and counseling and care among Adolescents living with HIV/Aids among (10-19) years. The study established that adolescents continue to be vulnerable especially for those who are living in slums and semi-slum settings. Although the most significant health burden of HIV/Aids infections is young people, the study established deficient levels of testing and

participating in counseling programs which mostly affecting early diagnosis and use of ARVs among young people (Odida, 2012). However, Odida acknowledges that testing and counseling are effective means to reduce HIV/Aids infection rate though young people are underutilizing testing and care.

KAIS Report (2012) is a useful tool for controlling HIV/Aids behavior among adolescents. Counseling was found to increase the rate by which adolescent was able to accept their status and begin taking ARVs and a way of reducing or suppressing the viral load. Counselling also was found to reaffirms to adolescents that they are not alone and therefore they can still pursue their daily aspirations as people who are not affected. Another study also found HIV/Aids counseling as an active process which act as an intervention for safe sex behavior which reduces re-infection among the youths significantly (Koblin, Chesney & Husnik, et al., 2003).

HIV/Aids counseling usually is divided into two categories that are post-test and pre-testing counseling. Pre-testing prepares the candidate to accept the outcome; it is also used to test the patient's readiness to take the issue which will determine whether the test should be done immediately or delayed awaiting further counseling to assist the patient to be ready for the testing (Odida, 2012). According to CDC report (2012) produced on the rate of counseling and testing among the adolescents, the results established that despite substantial investment on setting VCTs centers majority of the population about 80 percent do not know their HIV/Aids status. People also tend to resist their status once diagnosed with HIV/Aids.

Knowing HIV/Aids status studies have found significantly lowers the youth sexual behavior. This study was conducted in the United States, and it found that those who knew their HIV/Aids status had a lower chance of infection of about 30% to 34% of the new infections while those who did not know their status accounted for a higher rate of 54% and 70% (Sawires et al., 2007). Similarly, the same studies also found that wherever people are not aware of their HIV/Aids status, such persons are somewhat dangerous since they cannot practice safe sex behaviors and tend to lead reckless sex life (Noar, 2008).

The researcher then concluded that testing and counseling is an effective method for reducing HIV/Aids new infection and re-infection rates. Similarly, UNAIDS (2008) study was conducted on the rate of efficiency of risk reduction counseling methods and how it can be used to prevent HIV/Aids as well as other sexually transmitted diseases. The design was a randomized control trial. This meant that some of the target population were subjected to testing alone without counseling while some underwent through testing and counseling. In this approach, the effect of counseling alone could quickly be established.

Odida (2012) conducted a cross-sectional survey among the youths on the influence of HIV/Aids on behavior change among public secondary school in Mbita Sub County. The study found even though awareness level of causes and prevention mechanism of HIV/Aids was widespread, the majority of the youths reported having more than one sexual partners for the last one year. Testing and counseling were found to have less association on behavioral change since the majority of the youths do not like participating in knowing their HIV/Aids status. The study recommended several interventions targeting youth

friendly channels to help increase positive perception of the youth on testing and counseling services.

2.3 Youths promotion programs and Behavior Change

Studies have been previously done in Africa for instance in Zambia, Malawi, and Uganda on the impact of youth programs on behavior change (UNAIDS, 2008). The results established that youth programs where the youth are trained alone tend to be more effective since the majority of the youth will open up and accept to know their status and led responsible life after that. Evaluation studies by Gao (2012) in both East and Southern Africa established that majority of youth clubs had better knowledge and could be able to adopt risk-taking behaviors as opposed to youths who never engaged in youth clubs while in schools.

A study by Population Services International surveyed the achievements of youth programs on behavior change in Africa. The study established that youths who were engaged in youth programs and centers were twice likely to know the use of condoms appropriately as opposed to those who were not exposed to youth programs as well as they were less sky to purchase condoms. After 18 months of getting engaged in youth programs, 69 percent reported using condoms and talking freely on sexual matters as opposed to those who never underwent such intervention 56 percent reported using condoms the first time after training with their regular partners.

Similarly, the studies found that in Rwanda the youths who were exposed to youth programs believed that condoms were effective in preventing STIs and they fully supported condom use as opposed to those who were not exposed to youth programs. Youths who were also exposed to the program were also likely to accept counseling as well as testing for their HIV/Aids status as opposed to those who were not involved in the programs. The study found that 80% of the young women had done HIV test and only 2% of those who were not exposed to the program had conducted for their HIV/Aids therefore this study concluded that HIV programs are effective means of delivering effective behavior change among the youth to adopt best practices which prevent them from getting and spreading the disease (Ntaganira, 2012).

A study was also conducted in Malawi on the effectiveness of youth clubs influence on behavior change in the fight against HIV/Aids. The study established that with youth programs, more youths were able and willing to open up on their HIV/Aids status, and this allowed them to adopt appropriate behaviors which positively impacted the increased adoption rate of use of condoms, accepting to undergo counseling and testing for their status (Kippax & Race, 2003). As a result of this intervention, Rakaia Aids Network was established in Malawi to promote and bring adolescent together to discuss their challenges and receive training on HIV/Aids.

The network targeted youths who were out of school. An evaluation was also done on the effectiveness of the network which had been created, and it was found that trained adolescents were more knowledgeable about condom use, HIV prevention, and control

measures and were less likely to stigmatize an HIV/Aids patients. The adults, when questioned through the evaluation studies, reported that more and more youths were behaving responsibly after joining the network (Bello, 2012).

Studies also have been conducted in Kenya on the effectiveness of reaction activities in controlling behavior change among the school going adolescents (Wambua, 2012). These recreational subjects were considered as music, art, games, sports and participating in theatre, poetry and physical education. The studies established that these subjects could be useful channels for communicating safe sex messages since these subjects inspire the youths to think creatively outside of the classroom situation. Sports offer a useful outdoor activity which not only improves the health of the students learning which translates to better retention capability (Odida, 2012).

Sports was also found to give the majority of adolescents joy and hope to live beyond classrooms. Sports has also been found to offer an effective forum for those who are already infected with an opportunity to relax and think positively that even with an infection they are still useful and can participate actively in fun and games while at school (Banda & Lindsay, 2010). The authors concluded that recreational facilities, therefore, could be used as a channel of spreading crucial knowledge and prevention mechanisms which in turn would influence the behavior change of the youths.

A study by Banda and Lindsay (2010) examined the effectiveness of life skills in improving youth's sexuality and reproductive health among adolescents in Kenya. Research established that possessing life skills is critical to young people's ability to accept and adopt appropriate behaviors which positively lowered the rate of new infections and re-infections among the youth. Some of the life skills which the studies found to be very relevant to the topic were decision making, problem-solving, coping with emotions and negative stress and critical thinking skills. UNICEF (2012) reported that life skills are an effective measure for educating the youths on practicing healthy living, avoiding early sex, avoiding alcohol and other related drugs abuse and nutrition for those already affected with either STIs or HIV/Aids.

Past studies have found that regular participation of youths in physical activity (PA) has a positive influence on youth's health and well beings (Roberts & Barnard, 2005). The authors recommended that youths while at school should engage in physical activity at least 60 minutes daily. With regard to physical activity past studies have noted that gender influences the levels of physical activity (Gao, 2012). The findings established that more boys than girls had actively engaged in physical activities than boys. Elsewhere, other studies have recommended increased social support participation among the youths as a way of increasing their level of engagement and hence this in turn directly and positive influences their behavior.

According to past research studies organized sports is effective in promoting physical activities among youths while in schools. The first ten most popular sports for boys which can be integrated into school settings were found to include wrestling, football, basketball,

golf, and tennis, soccer, swimming, and diving (Odida, 2012). A similar study also found the ten most effective games for girls include basketball, outdoor track, tennis, volleyball (UNICEF, 2012). Participation of youths in sports was found to have a direct relationship on performance and less stress which makes the adolescents grow healthy and responsible people. Dale and Corbin, (2000) examined the effects of physical activity participation among high school students following exposure to physical education. The results found that physical education had a direct relationship to academic participation. However, this study failed to examine the reasons why direct participation in sports was healthy for the school going age and how exactly performance was related to physical activities in school.

2.4 Health Education and Behavioral Change

Health education can be defined as any action undertaken to prevent illness or to detect it at an asymptomatic stage. Health education is generally associated with enhances health and preventive ((Ntaganira, 2012). Some of the programs which can influence human sexual behaviour include health promotion and education interventions. Past studies have supported this assertion. Theories of health behaviour change highlight pertinent

Studies have found that behavioral change theories are Significant in influencing effective health education. Health education has been defined as any learning with a specific motive to help individuals change their behaviors, learn something new and influence attitudes (Bertozzi et al., 2008). Researches have established that health communication is more effective when they influence the decisions people make healthy choices. To be effective in passing HIV/Aids educational materials the change agent must use cognitive interview

testing. This allows the youths to contribute their thoughts, ideas, and feelings so as to improve message clarity (UNAIDS, 2008). The youth felt encouraged and valued if they are incorporated in the program design on intervention which concerns them.

Often any health education will be successful if delivered through the right channel and some methods include brochures, videos, posters, group discussions, demonstrations and one on one teaching. Therefore the effectiveness of health education depends on the level of participation and involvement of the youths in the program design, planning, and execution. Furthermore, it will also require accurate content and done in a format the youth will like (UNAIDS, 2001). The use of pictures or pictorial representation is important since pictures speak louder than words. The youths after training will most likely remember the picture and the message it conveyed to them.

Health materials are meant to make the readers understand and be able to make health decisions. For this to be achieved the health communication should easily be understandable, appropriate and relevant to the users. However, while there are many recommending the incorporation of learners needs, to date there are very few studies comparing the effectiveness of health materials outcomes to the adolescents and this study would fill this gap. Freire (1970) stated that education is the process whereby people increase their critical awareness on the reality of what surrounds them. This, therefore, has been interpreted by scholars that the role of education is to make citizens become more and more self -reliant thus one is able to appreciate the dynamics of various changes in society as well as improve to become a better person.

Wherever adolescent is trained on self-sexual behaviors this assist them to make informed choices and has been found by studies to significantly reduce HIV/Aids infection rate (Houa, 2010). Besides, education reduces stigma and discrimination which make most HIV/Aids patient hate to live since they will be discriminated. By people getting education, they stand a better chance to incorporate HIV/Aid patients and give them moral support which ultimately will make them led responsible lives. Thus without stigma people will feel free to go for testing and counselling and change their sexual behavior an advantage to the overall fight against HIV/Aids. Studies have also found that ignorant of people status increases the infection rate, people who either test negative or positive has been found to live responsibly. In one case, due to the dangers of re-infection and secondly due to the fact that they want to remain negative (Kalichman, 2006).

Baker (2015) studied the effectiveness of health education in reducing HIV/Aids through a change of behavior through secondary data collection method. The findings established that increasing health education reduces the infection rate among youths. However, in order to increase health education effectiveness, the materials used for learning must be relevant and appropriate to the learning grade levels of the learners. The author recommended that whoever is designing learning materials need to consider the behavioral theories supporting the learning outcome of the target populations.

Research studies by KDHS (2003) established that 90 percent of young people get infected by HIV/Aids through engaging in careless sexual contact. Girls, as opposed to boys, are five times more vulnerable to the same age. The report indicate that girls are more

exposed due to physiological factors, they have large mucosal on the virginal surface. The studies also found that men's semen has a higher concentration of virus and thus the virus from men can stay in the virginals for a very long time. Further findings from the report established that girls are not worried about HIV/Aids as opposed to pregnancies.

Ogden (2000) did a study on establishing the relationship between altitudes and behavior change among adolescents. The results of the study established knowledge was less significant to increase behavior change it only increase the level of fear which instead promoted denial, and thus the young people were still engaging in reckless sexual practices. However, organizing youth friendly forums are essential for reducing HIV/Aids infection rate. Onyango (2002) studied factors influencing risky sexual behaviors among the youths in selected schools in Bondo Nyanza province. The results established that 94 percent of the school is going youths who were found to have involved in sexual behaviors knew that HIV/Aids is not curable but nonetheless proceeded to involve themselves in unprotected sex.

The government of Kenya (2002) did a study on the young people level of awareness on the dangers of contracting HIV/Aids and if that awareness influenced their behavior. The findings established despite the fact that knowledge on ways of getting HIV/Aids within the general public had increased it was not translating to a reduction on behavior change. Knowledge of male condom was found to be higher than the knowledge of female condom use. A study by Karuru (2004) did a study among selected schools in Kiambu District

Kenya. The results found that even though the awareness level was high, the majority of students reported having multiple sexual partners.

Previous studies have concentrated on establishing whether a person receiving health knowledge can influence their health behavior and increase health outcomes. However, the findings never found a strong correlation between health knowledge and health outcomes; it was found that health access and adherence to quality of life is a factor of a personal level of education which generally influences household's income (UNICEF, 2010). Therefore, socio-economic status of a person was found to be strongly related to health outcomes and choices one is able to make. Findings established that adults with low formal education had high chances of getting HIV/Aids. Secondly, health promotion is based on health education, and health knowledge is the foundation of health education (Wambua, 2012).

According to UNESCO (2012), individual health behavior is as a result of intentional activities which aims to protect and improves the life of a person. However, often people who are healthy sometimes ignore the cost of taking adequate preventive measures as opposed to a sick person who considers health very important. This is because health affects an individual's choices to a great extent. Health education knowledge is inextricably linked to the awareness, motivation, and competence of people in accessing, understanding, appraising, and applying health information (UNAIDS, 2001). Such factors not only assist in improving human welfare but also transform and improve mental judgements which are appropriate for making informed health decisions (Slutkin, Okware, Naamara, et al., 2006). Furthermore, enrollees with chronic illnesses, who possessed increased rates of low health

knowledge, lacked proper health behaviors (UNAIDS, 2007). There is increasing research evidence that lack of knowledge results to delayed diagnosis and weak HIV/Aids management skills which causes many deaths among the affected.

2.5 Parental support and Behavior Change

Studies have found that parents play a significant role as early agents of socialization. Parents are the first point of school for young children through what the children see from how they behave (Slutkin, Okware, Naamara, et al., 2006). Research has established that parents who talk openly on sexuality and sexual behaviors tend to have teenagers who opt to delay sexual activity or decide to use birth control in order to control infections related with HIV/Aids. Past Studies have shown a higher correlation between families who do not communicate with their children about sexuality and sex-related issues.

Those children were found to be more vulnerable as opposed to children whose parents talk freely with them. Adolescents who acknowledge that their parents were free and open to them on an issue related to sex reported less frequency of engaging in illicit sexual activities as opposed to those adolescents whose parents assumed they were young and needed no counselling (UNAIDS, 2007). Most parents, especially religious parents were feeling unease to talk with children on matters to do with sexual behaviors UNESCO, 2012). Studies have investigated the relationship between parental-adolescent communication on children sexual behavior, condom use and HIV/Aids testing and counseling among school going children were studied. It was hypothesized that increased

parental communication and level of parental support to the adolescents was more likely result in reducing the risk of contracting HIV/Aids among adolescents.

Good parenting has been established to be beyond the mere provision of basic requirements and needs of a child. Studies have found that parents determine how their children will grow to adulthood to a great extent. Some of the roles of parents are; they determine child personality, emotional and maturity growth and development aspects of the child (UNESCO, 2012). Parents also influence child behavioral, temperamental actions. Therefore, parents should be there for the children in all aspects including sex education. The presence of parents who do not consider a child through holistic angle is that a child may grow well but emotionally distressed and less engaged with others due to a feeling of superiority complex or inferiority complex (Koblin, Chesney, Husnik, et al., 2003).

A study was conducted between children competence and parents' investment in such children. Findings established that emotional involvement of parents on their children determine the overall outcome of such children. The study recommended that parents should be engaged throughout the developmental stages of their children without living such roles to someone else. Further studies according to Alan Sroufe found that early parental attachment with the children determine the type of relationships the child will have with their parents and overall behavior of such children (UNAIDS, 2007). Parents who are less attached to their children cannot institute any corrective behavioral measures on them during late years.

Many studies have found a relationship between child discipline and behavior change in young children. Parents who tend to be harsh and overactive, as well as inconsistent parents, usually encourage bring up indiscipline children (UNESCO, 2012). This argument is supported by social learning theory which suggests that children may learn to behave aggressively if they come from failed families and poor parental model to children. However, some studies with older children have found that harsh discipline predicts changes in behavior while studies examining young children have produced inconsistent findings. In the United States, a study found that children who had harsh mothers often had a behavioral problem.

According to U.S. Census Bureau statistics (2012), the report shows that type of parents influence infection rates. Single parents with low incomes are at high risk of conducting HIV/Aids as opposed to families with both parents and having well income. This impact of single parents on child upbringing was also found to be correlated with academic performance and their general social behaviors. Moreover, other studies by WHO (2014) found that financial constraints of parents are associated with emotional effects, sadness, loneliness and those children tend to live permissive lives as well as early trials of drugs.
. Results vary from child to child, however, and the individual parenting style of the single parent is also a significant influence on the child's development.

Parents' involvement in their children's education is generally thought to affect children's academic outcomes. More recently, researchers have found that parent involvement also relates to children's externalizing behavior) (Gray & Kigozi, et al., 2007). The association between parent involvement and behavior problems could be negative or positive. When

parents are more involved in their children's education, those children may exhibit fewer behavior problems. On the other hand, when children are showing behavior problems, parents may become more involved in the response. Studies have also found that a child temperament has a significant role in emotional development. This therefore, means that parents need to meet the emotional needs of their children and they need to receive positive statements (KAIS, 2007).

2.6 Research Knowledge Gaps

Objectives	Constructs	Available literature	Findings	Gaps
Counselling services and behavior change	Counselling services	CDC report (2014), (Sawires et al., 2007). Bateganya, M.H., Abdulwadud, O.A., & Kiene, S.M.(2007	Counselling and testing has a weak association to behavior change among school going teenagers	Inconsistency in the literature on whether counselling has positive impact or negative so this study will verify the true position
Youth programs and behavior change	Youth programs	(Bateganya et al.,2007)	Youth promotion programs has a strong association with behavior change among school going teenagers	Most literature not done in Mbita region therefore this study will find out whether in Mbita youth programs can yield similar results. The study will also establish some negative behaviors youth clubs promote in schools
Health education and behavior change	Health education	UNAIDS, 2008). Baker,2015)	Health education has a weak relationship in influencing behavior change however, socio-economic status of	Literatures have not yet established whether behavior change on health education is due to fear or the outcome for learning

			individual was found to strongly influence health decisions among families	
Parental provision of funds to youths and behavior change	Parental provision of funds to youths	(Slutkin, Okware, Naamara, et al., 2006).	Parental influence was found to strongly influence children development outcomes	Most studies ignore to establish how excess funds can spoil the youths and therefore this study will confirm the role of funds at the same time look at the dangers of excess funds to school going age

2.7 Theoretical framework

Theoretical review provides a set of statements and offers descriptions, explanations and predictions on a given phenomenon (Kombo & Tromp, 2006, Orotho, 2012). The theoretical review for this study focuses on the relevant theories to support the study variables. Theories are viewed as propositions that present systematic outlook of a situation by specifying the relationships between variables (Guyo, 2012). The variables in this study are anchored in health belief model and social learning theory.

2.7.1 The Health Belief Model

Health Belief Model (HBM) is psychological models that attempts to explain and predict health behaviors. This model was developed by Hochbaum, Rosenstock and Kegels (1950s) while working in public health in United States. The theory holds that an individual will take a health related action like the use of condoms if they know condom can prevent infection and reinfection. The person has also a positive expectation that by using condom he/she will avoid a negative health condition. According to these theorists, taking a recommended health action is based on perceived susceptibility, severity, benefits, barriers and self-sufficiency.

The main elements of HBM focus on individual beliefs about health conditions which predict individual health-related behaviors. The model defines the key factors that influence health behaviors as an individual's perceived threat to sickness or disease (perceived susceptibility), belief of consequence (perceived severity), potential positive benefits of action (perceived benefits), perceived barriers to action, exposure to factors that prompt action (cues to action), and confidence in ability to succeed (self-efficacy).

2.7.2 Bandura - Social Learning Theory

This theory was advanced by Albert Bundura in (1977). The theory argues that children observe the people around them. In society, children are surrounded by many influential models, such as parents within the family, characters on children's TV, friends within their peer group and teachers at school. These models provide examples of behavior to observe and imitate. Parents should act as role models and offer both external and internal reinforcement to influence behavior. Positive (or negative) reinforcement will have little

impact if the reinforcement offered externally does not match with an individual's needs. Reinforcement can be positive or negative, but the important factor is that it will usually lead to a change in a person's behavior.

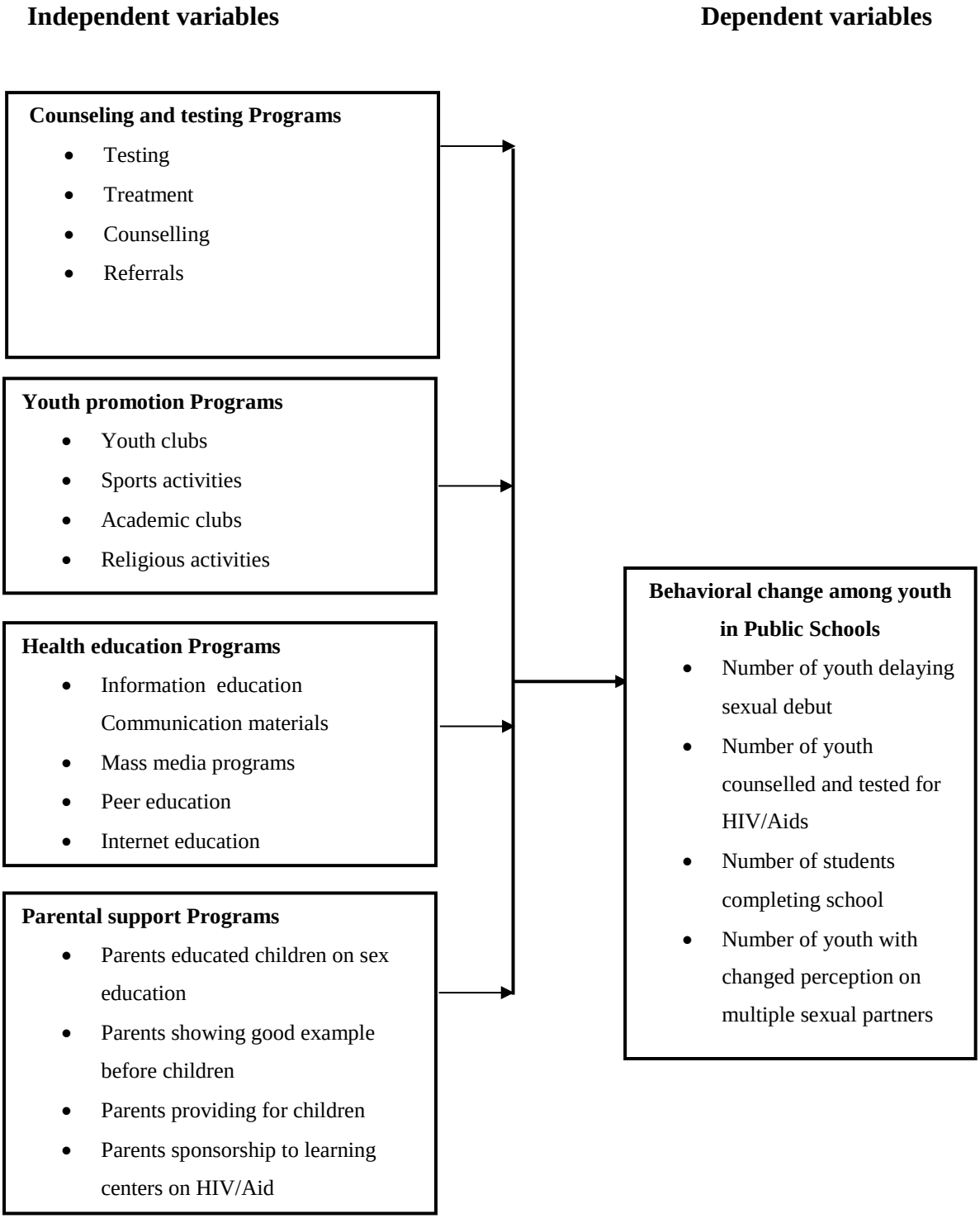
Third, the child will also take into account of what happens to other people when deciding whether or not to copy someone's actions. A person learns by observing the consequences of another person's (models) behavior a younger sister observing an older sister being rewarded for a particular behavior is more likely to repeat that behavior herself. This is known as vicarious reinforcement. This relates to an attachment to specific models that possess qualities seen as rewarding. Children will have a number of models with whom they identify. These may be people in their immediate world, such as parents or older siblings, or could be fantasy characters or people in the media. The motivation to identify with a particular model is that they have a quality which the individual would like to possess. Identification occurs with another person (the model) and involves taking on (or adopting) observed behaviors, values, beliefs and attitudes of the person with whom you are identifying.

2.8 Conceptual Framework of the Study

Conceptual framework can be defined as construct whereby each concept is integral to the other. Miles and Huberman (1994) has argued that conceptual framework lays out the key factors or variables in the study. In order to conceptualize the variables in this study of Influence of HIV/Aids Awareness on Behavior Change among the Youth in Public Secondary Schools in Mbita Sub County, the dependent variable on measuring behavior change will include; Delayed sexual debut, School completion rate, improved health

seeking behavior and Peer support. For the purposes of this study HIV/Aids awareness which will be characterized as independent variable (IV) will include; counseling and testing perception, presence of youth programs, health education programs and parental support programs in increasing their children awareness about HIV/Aids prevention measures.

Figure 2.1: Conceptual Framework of the study



2.9 Summary of Literature Review

The study was concerned about various aspects of HIV/Aids awareness and how they impacted on behavior change among adolescents. It was clear through the literature that increased awareness did not translate to behavior change among the youths and that to increase the effectiveness of awareness the program implementation needed to be designed in such a manner that youth find it appropriate and relevant to their setting. More so the studies from the literature acknowledge the need to collecting baseline survey before designing youth program since these will allow them time to develop youth friendly programs which will be effective to the youths. Besides, the studies establish that parents as the first role model for children need not to be left out from this war of reducing HIV/Aids among the youths.

CHAPTER THREE

RESEARCH METHODOLOGY

3.1 Introduction

This chapter highlighted the methodology that was used in the study. The study methodology focused on the process and tools as well as procedures used to answer research questions. It simply described the how and what of the process of addressing the research questions.

3.2 Research Design

The study adopted a descriptive survey research method. This method was used to describe characteristics of variables; analyze the frequency, distribution and observable phenomena of the study population. The researcher chose the method since it enables the study to establish the relationships between variables.

Descriptive survey employs use of questionnaires and interviews as the primary means of collecting data which this study adopted. The design also improves both internal and external validity and the realism of the context thereby reducing risk of false exclusion (Cooper and Schindler, 2011). Another advantage associated with the descriptive study design relates to ease of establishment of associations between variables and comparisons, possibility of administration of questionnaires to many respondents and anonymous completion of questionnaires.

3.3 Target Population

The target population of this research consisted of students, teachers and Board of Management members from six public secondary schools in Mbita sub-county which was further classified into two categories, primary and secondary targets. The primary target audience were students, however teachers and BoM members were also considered to validate the information gathered from the students. The research only sampled students from six schools with HIV programs .The target population in this study has been identified by the research objectives which clearly outline the scope and area of interest which is secondary schools in Mbita constituency, Homabay District. Mugenda and Mugenda (2008) define target population as the set of individuals, cases or objects with some common observable characteristics, which a researcher wants to generalize the results of the study. The unit of observation for this study will be public secondary schools with more than two streams in per class in Mbita Sub-County and the units of analysis was enrolled students in the schools.

The total population of students, teachers and BoM in the selected schools was 3317, 114, and 50 respectively. The sub-county was chosen for this study since according to KDHS 2014 report, Nyanza province has been leading on HIV/Aids infection rate with prevalence of 13.5 percent and Mbita at 26 percent (MoH, 2017). The target population sample frame Table 3.1 summarizes the school population from where the respondents the research had intended to reach.

Table 3.1: Target Population

Name of School	Students	Teachers	BoM
Mbita High School	1234	37	10
Waondo Mixed Secondary school	517	27	8
Wasamo Girls Secondary school	406	13	8
Wakula Mixed Secondary School	403	11	7
Kakiimba secondary School	318	14	8
Sena Secondary school	439	12	9
Total	**3317**	**114**	**50**

3.4 Sample Size and Sampling Procedure

This section covers sample size and sampling procedure used in the study.

3.4.1 Sample Size

To obtain the desired sample size for the study, the researcher adopted Mugenda and Mugenda (2013) suggestion that states, where the population is less than 10,000; a sample size of between 10 % and 30% is a good representation of the target population. The researcher therefore adopted 10 % as adequate representation for the population and calculated as; Students; 10% of 3317, Teachers; 10 % of 114 and BoM; 10 % of 50 which gave (331.1 + 11.4+ 5). This equals 347.5 rounded off to 348 and therefore, from the target population the sample size for the study was 348 and this formed the unit of analysis. The proportionate sample size of each of the categories of the boys and girls per school based

on proportion. The simple random sampling was used to pick students from each classes so that the respondents would be representative of each unit of analysis.

3.4.2 Sampling Procedure

The research adopted both probability and non-probability sampling techniques, therefore systematic random sampling was used to select schools where HIV programs exist and further selected a combination of girls, boys, day and boarding schools to ensure gender representation. The choices of this method is backed by (Kothari, 2004) because it provides representative population which is more precise.

The non-probability was used for purposive sampling, this generally covered respondents who were handpicked such as career teachers and Board of management. This was purposely to validate the information that the students provided and also extent of school involvement in availing HIV/Aids services within the schools.

3.5 Research Instruments

The research had two instruments of data collection that is the questionnaire and interview schedule. The questionnaire was divided into three parts, part one required demographic information while part two was collection of open minded information with structured questions. Part three was to collect the opinion and the attitude of the respondents and this brought the Likert scale type of questions. The questionnaires were administered to the respondents and collected after three days. The researcher conducted the interview himself and only the board members and teachers were interviewed using the structured interview guide. The questionnaires were designed using 5-point Likert scale highest 5 to the lowest 1. Using Likert- scale is a way of standardized responses and therefore eliminated extreme

responses and encourage coding and analysis using SPSS statistical software (Kothari, 2004).

3.5.1 Pilot Study

Pilot study was conducted in Kisumu Girls High school which had similarities with the chosen schools. Thirty six (36) questionnaires were administered and all of them were filled and returned for analysis. The aim of piloting was for the researcher to test the adequacy and accuracy of the instrument's capability to measure what it is supposed to measure. Other issues which will be checked during pre-testing include clarity of wording, whether questions are easy to fill and test on the average response time to complete filling the questionnaire and moreover to check any elements of sampling bias using the chosen design.

Mugenda and Mugenda (2008) indicated that pilot testing is important in gauging the validity and reliability of the research instrument. From the pilot test, the researcher was able to see what needs to be adjusted in the research instrument and the same done before the commencement of the main survey. Jaggar (2009) considered one percent (1%) of a population as adequate for pilot testing and this study adopted the same.

3.5.2 Validity of the Instruments

The researcher gave experts the instruments to review and give feedback. This helped in ascertaining content validity of the instruments. Miller (2009) defined validity as the accuracy of the data and the extent to which the data collection instruments measure what

they purport to measure. Babbie and Mouton (2009) alluded that validity is the extent to which empirical measure adequately reflects the real meaning of the concept under consideration.

To ensure instrument validity the researcher used pre-testing of the research instruments. This was done by administering 36 questionnaires to a similar school environment to make the instrument free from any errors and wording mistakes. Pre-testing was also done to help validate the accuracy as well as correctness and appropriateness of the instrument to allow the instrument collect quality information.

3.5.3 Reliability of the Instrument

To ensure reliability of the research instruments, the research employed test, re-test reliability and internal consistency reliability methods of measurements. Test reliability was attained by administering the questionnaires to 36 respondents in an interval of one week a part during pilot survey in Kisumu Girls High school.

Internal reliability was tested using Leech et al. (2005) suggestion of Cronbach's coefficient alpha which is most commonly used measure of internal consistency reliability. For this study the scale was set at Cronbach's Coefficient alpha of 0.8 or 80%.

3.6 Data Collection Procedure

The researcher administered questionnaires to the students to fill as per their opinion. This was done by trained research assistants who guided the respondents on how to correctly fill in the questionnaires. The respondents were given three two hours each to respond to the questionnaire. Upon completion, the research assistants collected the questionnaires

and verified completeness of the completed questionnaires. The teachers and Board of Management were interviewed separately by the researcher and the information recorded using audio recorders and phone applications.

3.7 Data Analysis Techniques

The study collected quantitative and qualitative data through the use of well-designed questionnaire using 5- point Likert. The data once collected was cleaned, screened and coded and entered into Microsoft excel before imported to SPSS for analysis. The design of the questionnaire was mixed, Likert scale where the participants were giving their levels of agreement or disagreement with the statements and age was given as a continuous variable while outcome variable was categorical binary where student were also to say picked options in terms of agreements to statements in scale of 1-5.

The questionnaire was divided into various sections; demographic information of respondent's, counselling and HIV/Aids testing, youth promotion programs, health education programs, parental support and behavior change which is the dependent variable of the study. Analysis focused on descriptive frequencies since the data was nominal only non-parametric tests were performed on the data, chi-square, spearman's coefficient to test association and binary logistic regression was used to develop model.

3.8 Ethical Consideration

Ethical consideration dealt with matters of right and wrong. In this study ethical consideration involved seeking for relevant permits for clearance to dispel any doubt on the use of the study, observance of confidentiality and informed consent. To be able to observe confidentiality, the respondents' names or any other means of identification were

not be written on the questionnaire but numbers were used instead for tracking the respondents. This was meant to protect the subject identity to avoid discrimination or ridicule among their peers due to the information she/he released on the HIV/Aids status.

Informed consent, according to Kothari (1999) means that a person knowingly or willingly agrees to participate in the study and give voluntary consent. The questionnaire will had a brief introduction clearly indicating the purpose and a Non-coercive Disclaimer" which states that participation is voluntary and no penalties are involved in refusal to participate.

Ethical consideration involved seeking relevant research permissions and permits from authorities clearly indicating the purpose of the study. Since the respondents were school going age in Mbita, Homabay County, research permit was received from County Director of education, and university authorization permit. The researcher sought also Research Clearance Permit from the National Commission of science, technology and innovation (NACOSTI).

3.9 Operationalization of Variables

Table 3.2: Operationalization of Variables

Construct	INDICATOR	Me**asurement Scale**	**Literature**	**Statistical test**
Counselling and testing programs	• Testing • Peer counseling • Referrals	Interval Interval Nominal	Quantitative & Qualitative	Frequency and percentages, cross tabulation , chi-square tests, Regression
Youth Promotion programs	• Sports activities • Academic clubs • Religious activities	Nominal Nominal Nominal Nominal	Quantitative & Qualitative	Frequency and percentages Chi-square tests Regression analysis
Health education programs	Mass media Peer education Internet education	Ordinal	Quantitative & Qualitative	Descriptive statistics and inferential statistics: Frequency & percentage

				Regression analysis, correlation analysis
Parental support programs	• Role models • Sex education • Provision of sponsorship	Nominal Nominal Nominal	Quantitative & Qualitative	Descriptive statistics and inferential statistics: Frequency & percentage Regression analysis, correlation analysis
Behavior change	• Delayed sexual debut • Number of students in schools • Number of students testing	Ratio Interval Nominal	Quantitative & Qualitative	Descriptive statistics and inferential statistics: mean, standard deviation, regression analysis, correlation analysis

CHAPTER FOUR

DATA ANALYSIS, PRESENTATION, INTERPRETATION AND DISCUSSIONS

4.1 Introduction

The chapter provides an analysis of data collected from the field. The results are presented based on the study variables. Since nominal and ordinal data were collected using Likert-scale, the analysis is based on frequencies, cross tabulation and non-parametric tests. The chapter also presents the findings of the hypothesized relationships .The chapter provides an analysis of data collected from the field. The results are presented based on the study variables. Since nominal and ordinal data were collected using Likert-scale, the analysis is based on frequencies, cross tabulation and non-parametric tests. The chapter also presents the findings of the hypothesized relationships between the predictor variables and the dependent variable.

4.2 Response Rate

The researcher was interested in knowing response rate and administered 348 questionnaires and only 275 were collected, the responses and the results are shown in the table 4.1. Out of the questionnaires distributed, 275 were fully filled and returned for analysis comprising 79% response rate.

Table 4.1: Questionnaires Return Rate

Schools	Distributed	Received	% Percent
Mbita High School	60	50	83
Waondo Mixed Secondary school	60	50	83
Kakiimba Secondary school	60	45	75
Wasamo Girls Secondary school	58	45	78
Wakula Mixed secondary school	50	40	80
Sena Secondary school	60	60	100
Totals	**348**	**275**	**79**

Table 4.1 and representation of respondents per school who participated 50 students participated in the survey from Waondo Mixed Secondary School, 40 students from Kakimba and 40 students from Wasamo Girls Secondary School. Mbita High school and Sena secondary school had 50 students each while Wakula secondary had 40 representation. This in total was 275 or 86 percent response rate. Mugenda and Mugenda states that a response rate of 0.7 or 70 percent is adequate, therefore the response rate was sufficient.

4.3 Demographic Characteristics

The demographic characteristics of the respondents were examined in light of the view to establish the general composition and test if any significance difference existed within the demographic patterns and how they responded to the criterion variable (delaying sexual debut). The outcome

variable being dichotomous categorical variable, cross tabulation and chi-square test was performed in each case and results presented in the tables below.

4.3.1 Distribution of Respondents by Age

Age of respondents was examined in light to establish the age composition of the respondents. The results are represented in Table 4.2.

Table 4.2: Distribution of respondents by age

Age	Frequency	Percent	Cumulative Percent
13	3	2.9	
14	63	22.9	24.0
15	98	35.6	59.6
16	52	18.9	78.5
17	29	10.5	89.1
18	24	8.7	97.8
19	6	2.2	100.0
Total	275	100.0	

The maximum age was 19 years and minimum age was 13 years. Only three students were aged 13 years representing 2.9%, 63(22.9) students were aged 14 years, 98 (35.6 %) students aged 15 years,52 (18.9 %) students aged 16 years , 29 (10.5 %) students aged 17 years, 24 (8.7 %) students aged 18 years and 6 (2.2 %) students were aged 19 years who participated in the survey.

4.3.2 Type of the school

The researcher was interested in understanding the distribution of respondents by type of school to determine if they influence behavior. Type of school for the respondents was also examined in this study as a key demographic information of the respondents. The results are shown on table 4.3;

Table 4.3. Distribution of respondents by type of the School

Variable type	Frequency	Percent	Cumulative Percent
Girls boarding	90	32.7	32.7
Mixed boarding and day	66	24.0	56.7
Girls and Boys day	119	43.3	100.0
Total	**275**	**100.0**	

Type of school for respondents was also examined. The findings established that majority of the respondents were from Girls and Boys Day 119 (43.3 %), followed by Girls Boarding 90 (32.7 %) and Mixed Boarding were 66 (24 %).

4.3.3 Gender of the Respondents

The researcher considered gender of the respondents as a key demographic information in this study, the findings were examined and presented in the table 4.4.

Table 4.4: Distribution of respondents by Gender

Variable	Frequency	Percent	Cumulative Percent
Male	109	39.5	39.6
Female	166	60.5	100.0
Total	**275**	**100.0**	

Table 4.4 depicts that more females participated in the survey at 166 respondents or 60.5 % while male respondents took 109 (39.5 %). There were 109 respondents who were male and 166 female who participated in the survey.

4.3.4 Parental Status

Parental status was also considered as a key variable within this study. Frequencies and descriptive statistics was collected and tabulated in table 4.5 below

Table 4.5: Distribution of respondents by Parental Status

	Frequency	Valid Percent	Cumulative Percent
Partial orphan	142	51.6	51.6
Both parents alive	109	39.6	91.3
Complete orphan	18	6.5	97.8
Adopted	6	2.2	100.0
Total	**275**	**100.0**	

Table 4.5 provide results of the respondent's parental status. The highest proportion of the respondents were partial orphans 142 (51.6 %), followed by both parents alive 109 (39.6 %). The next was complete orphans representing 18 (6.5%) and lastly adopted children 6 (2.2 %).

4.4 Counselling and testing programs and behavior change among youth

The first objective for this study was to examine the effects of counselling and testing in influencing behavioral change among youths in public secondary schools in Mbita Sub County, Kenya. Questions were designed in Likert-scale format where 0= strongly disagree, 1= disagree, 2= neutral, 3= agree and 4= strongly agree. In order to answer the first objective ten constructs were asked to the respondent so that they can indicate their level of agreement and disagreement with the various statements. The results were presented using frequencies as shown below in Table 4.6.

Table 4.6: Counselling and testing programs and behavior change

Testing and counselling	Strongly disagree (%)	Disagree (%)	Undecided (%)	Agree (%)	Strongly Agree (%)	Mean	Standard deviation
How important is HIV/Aids testing and counselling	27.3	3.3	0.0	0.4	68.8	2.81	1.803
Knowledge of HIV/Aids status is empowering	0.0	0.0	19.6	18.2	62.2	3.43	0.800
Testing and counselling help curb the spread of HIV/Aids	61.1	5.1	0.0	0.0	21.8	2.85	1.663
Counselling services are useful in reducing HIV/Aids	22.5	5.5	3.6	4.4	64.0	2.82	1.703
I value peer counselling	28.7	2.2	0.4	2.2	68.7	1.92	1.805
Can you get HIV/Aids through mosquito bite	88.4	11.3	0.0	0.0	0.0	395	0.379
If I have sex and I shower immediately I cannot get HIV/Aids	91.6	8.4	0.0	0.0	0.0	1.45	0.317
School going teenagers should be provided with timely accessible HIV/Aids services	25.8	11.3	1.5	9.1	52.4	1.2	0.277

On Table 4.6, whether HIV/Aids testing and counselling can reduce sexual debut of adolescents, 68.8% strongly agreed while 27.3% strongly disagreed, 3.3% disagreed while 0.4% of the respondents agreed with the opinion. The mean for the response was 2.81 with a standard deviation of 1.803. Consequently, majority of the respondents cited that knowledge of ones HIV/Aids is

empowering (62.2%), 19.2% were undecided while 18.2% agreed with the statement. With Mean of 3.43 and 0.800 standard deviation.

On the statement whether testing and counselling help reduce HIV/Aids, majority of the respondents 61.1% strongly disagreed, and only 21.8% strongly agreed, the mean was 2.85 and standard deviation of 1.663. And whether counselling services are useful, 64% agreed while 22.5% strongly disagreed and standard deviation was 1.703 with a mean of 2.82. The statement whether the respondents value peer counselling 68.7% of the respondents strongly agreed with the statements while 28.7% strongly disagreed with the statements, only 2.2% disagreed and agreed with the statement respectively, the stamen had a mean of 1.92 and standard deviation of 1.805.

However, the study found that majority of the respondents were aware they could not get HIV/Aids through mosquito bites and neither taking shower immediately after having unprotected sex can assist them not to get HIV/Aids 88.4% and 91.6% respectively. The two questions had a mean of 3.93 and 1.45 respectively with standard deviation of 0.379 and 0.317 respectively.

The respondents also strongly agreed that school going teenagers should be provided with support if at all they have HIV/Aids 52.4% and majority of the respondents strongly agreed there is no cure for HIV/Aids 88% with mean of 1.2 and standard deviation of 0.277. From these findings it is clear elements of counselling and testing significantly affects how school going adolescence can behave on matters regarding sex before marriage. Cross tabulation was also run between dummy variable created all the items average values testing on how gender influence the counselling and testing. Person chi-square $r_s = 33.387$, $N = 275$ and $p < 0.05$, $p = 0.042$ showing statistically significance. This means different gender view issue of sex before delaying sex until differently with boys more

likely to oppose delaying as opposed to girls. Similar findings was also found elsewhere by Population International researchers on perception of HIV/Aids on school going adolescences found that girls are more likely willing to practice safe sexual practices because of fear of pregnancies before marriage than boys are less willing to have safe sex practices.

4.5 Youth Promotion programs and behavior change among Youth

The second objective of this study was to determine the influence of youth promotion programs on behavioral change among secondary schools in Mbita Sub-County Kenya. Questions were designed in Likert-scale format where 0= strongly disagree, 1= disagree, 2= neutral, 3= agree and 4= strongly agree. In order to answer this objective nine constructs were asked to the respondents so that they can indicate their level of agreement and disagreement with the various statements. The results were presented using frequencies as shown on table 4.10

Table 4.7: Youth Promotion programs and behavior change among Youth

Testing and counselling	Strongly Disagree (%)	Disagree (%)	Undecided (%)	Agree (%)	Strongly Agree (%)	Mean	Standard deviation
How important is HIV/Aids promotion program	0	0	0	9.5	90.5	2.51	1.756
In clubs in schools we get training on HIV/Aids	38.2	3.6	2.2	10.5	45.5	3.88	0.326
At clubs we develop good characters on how to abstain from sex	0	3.3	2.2	31.3	63.0	3.91	0.293
Sporting events make us so busy as we have less time getting idle	3.6	6.5	9.1	15.3	65.5	2.21	1.858
Church programs have changed my perception on HIV/Aids	9.5	9.8	7.0	8.4	71.4	3.55	0.700
Academic clubs are useful for passing information on HIV/Aids	78.9	2.9	0.4	2.2	15.6	3.32	1.111
Academic clubs assist to acquire	4.0	7.6	18.9	9.5	60	4.00	0.00

Table 4.7 shows that majority of respondents 90.5% indicated. The respondents indicated clubs in schools are not very effective 38.2% and 45.5% strongly agreed. In the statements are clubs develop good characters, majority of the respondents 63% stated that clubs are useful, 31.3% agreed. On the statements of church programs impact on reshaping school behavior for students,

majority 71.4% indicated strongly agreed and 8.4% agreed. The respondents also indicated that academic clubs are useful 78.9% strongly disagreed and 15.6% strongly agreed. However, the respondents indicated that academic clubs assist them to acquire good mannerism and remain dedicated and focused which is good in behavior change 60% while 18.9% of the respondents were undecided on the item. Cross tabulation was also run testing statistical relationship between gender and promotion programs person chi-square rs =41.224, df (17) and statistical significance 0.001. The

55 results showed statistical relationship indicating that gender influences promotion programs.

4.6 Health Education programs and behavior change among Youths

The third objective was to evaluate the impact of health education on behavior change among youths in public secondary schools in Mbita Sub-County, Kenya. Questions were designed in Likert-scale format where 0 = strongly disagree, 1= disagree, 2 = neutral, 3 = agree and 4 = strongly agree. In order to answer the first objective ten constructs were asked to the respondent so that they can indicate their level of agreement and disagreement with the various statements. The results were presented using frequencies as shown on Table 4.8

Table 4.8: Health education programs and behavior change among Youths

Item	Strongly disagree (%)	Disagree (%)	Undecided (%)	Agree	Strongly Agree	Mean	Standard deviation
How important health education program	1.1	1.5	0.7	7.6	89.1	3.23	1.386
Promoted pamphlets on HIV/Aids best information adolescents	7.3	4.7	9.8	17.1	61.1	3.11	1.288
Healthy looking people are less likely to have HIV/Aids	66.7	2.9	1.1	0.0	32.0	1.4	0.9
Radio program are best teaching youth HIV/Aids	2.2	3.6	0.4	14.2	79.6	3.14	1.2
Television program are best teaching	19.3	14.5	1.1	9.8	55.3	3.82	0.617
Peer education is best at passing HIV/Aids	4.0	14.3	4.1	0	72.4	3.20	1.232
Social media is more effective for learning	25.5	32.7	8.0	1.5	32.7	2.67	1.668
We have access to internet information	10.9	9.5	2.9	2.9	73.8	3.31	1.259

The results from table 4.8 shows that 89.1% strongly agreed health education is very important, 7.9% agreed. This item the findings established had a mean of 3.23 and standard deviation of 1.386. The study also sought to establish how promotion of pamphlets enhanced adolescence behavior change. Majority of the respondents 61.1% and 17.1% strongly agreed and agreed respectively while 7.3% and 9.8% were neutral. Another question tested the adolescent's perception on those who are likely to have HIV/Aids between healthy looking people and those who were thin.

Majority of the respondents indicated that 66.7% disagreed with the fact that healthy looking people are less likely to have HIV/Aids while 32% strongly agreed that when a person look healthy they have less chances of having HIV/Aids virus. The item testing on whether radio programs are the best in training the youths on HIV/Aids, majority of the respondents 79.6% strongly agreed and 14.2% agreed while mean was 3.14 and standard deviation of 1.2. Whereas in item whether television programs were best suitable for promotion of the majority 55.3% strongly agreed, 19.3% strongly agreed, 14.5 disagreed. Mean for this item was 3.82 and standard deviation of 0.617.

When the respondents were tested on whether peer education is the best method for passing HIV/Aids to the adolescents, majority 72.4% strongly agreed while 14.3% disagreed. Overall mean of the response was 3.2 and standard deviation of 1.232. while the item testing on whether social media is more effective for learning on HIV/Aids 32.7% strongly agreed while 25.5% strongly disagreed and 32.7% disagreed, the item had a mean of 2.67 and standard deviation of 1.668. This findings revealed that social media was not effectively used in passing any HIV/Aids education programs. The item whether accessibility to the internet had some relationship in this study to delaying sexual debut , majority 73.8% strongly agreed that nowadays they get a lot of information through the internet while 10.9% strongly disagreed.

This response mean was 3.31 and standard deviation of 1.259. Generally, the overall response rate on this variable was majority of the school going adolescents believed that effective education programs can reduce their careless sexual behavior hence this can lower the HIV/Aids infections rates among the adolescents through adoption of safe sexual practices or delaying sexual debut until they can get marriage.

The results showed that health education had a weak positive relationship to delaying sexual debut among secondary school going adolescents in Mbita Sub-County whereas $r_s = 0.045$ and n= 275 and p> 0.05 p= 0.457 indicating lack of statistical significance between the variables. Equally the study found that there was no statistical significant between youth promotion programs and the study outcome variable $r_s = 0.022$ and n= 275 and p> 0.05 p= 0.715. However, there study found a positive strong association between parental support programs and delaying sexual debut $r_s = 0.634$ and n= 275 and p < 0.05 p= 0.027. The model was able to classify 80.4% cases who could not accept to delay their sexual debut. The odds ratio for gender indicates that when holding all other variables constant, a female is 1.724 times more to accept to delay as opposed to a man. The study also found negative association between health education programs and outcome variable rs = - 0.018, n = 275 and p> 0.05, p= 0.766.

4.7 Parental support programs and behavior change among Youths

The fourth objective assess how the parent support programs influence behavior change among youths in public secondary schools in Mbita Sub-County, Kenya. Questions were designed in Likert-scale format where 0 = strongly disagree, 1= disagree, 2 = neutral, 3 = agree and 4 = strongly agree. In order to answer the first objective seven constructs were asked to the respondent so that they can indicate their level of agreement and disagreement with the various statements. The results were presented using frequencies as shown below in Table 4.9

Table 4.9: Parental Support programs and behavior change among Youths

Item	Strongly disagree (%)	Disagree (%)	Undecided (%)	Agree	Strongly Agree	Mean	Standard deviation
How important are parental support	12.7	14.2	2.5	5.5	65.5	2.02	1.851
My parents taught me about HIV/Aids	54.5	30.2	1.5	6.5	7.3	1.83	1.623
My parents share with me information on HIV/Aids	18.2	8	0	0	72.8	3.19	1.448
My parents are role models	0	0	0	9.1	90.9	2.96	1.549
My parents have adequately provided for me	36.4	34.2	2.2	5.1	22.2	1.62	0.83
My parents have paid for me to attend seminars on HIV/Aids	13.1	43.6	2.2	9.8	31.3	3.03	1.644
My parents have purchased me books on HIV/Aids	45	24.4	0	2.5	26	3.91	0.285

Table 4.9, provides results on how parental support affects behavior change. According to the results most of the respondents 65.5% indicated that parental support is important towards adopting positive behaviors on HIV/Aids, 5.5% agreed, 2.5% were undecided, 14.2 disagreed and 12.7% strongly disagreed. The mean was 2.02 and standard deviation of 1.851. The third item wanted to know whether parents train their children on HIV/Aids. 54.5% of the respondents strongly disagreed with the statement their parents do not train them, 30.2% disagreed, 7.3% strongly agreed. The mean for this item was 1.83 and standard deviation of 1.623. These findings found that parents do not actively participate in training their children about adopting safe sexual practices and delaying sexual debut.

The third item under parental support established that majority of the respondents 72.8% strongly agreed their parents share with them information on HIV/Aids while only 18.2 % of the respondents disagreed with the statements, the mean for this response was 3.19 and standard deviation of 1.448. The statements whether children feel their parents were role models had a mean of 2.95 and standard deviation of 1.549. Majority of the adolescents 90.9% strongly agreed that their parents were role models while 9.1% agreed.

The statements testing on parental provision to the adolescents, majority of the respondents 36.4% strongly disagreed that their parents were not giving them adequate support, 34.2% disagreed and only 22.2% of the respondents indicated strongly that their parents were giving them adequate support. The mean response was 1.62 and standard deviation 0.83. On the question whether parents are supporting the adolescents to attend HIV/Aids training seminars, 31.3% strongly agreed with the statement, 13.1% strongly disagreed, 43.6%

disagreed, and 31.3% strongly agreed and 26% strongly agreed. The general response was that parental involvement in supporting and educating their children on matters related to HIV/Aids is critical for the all-round upbringing of the adolescents. Any support towards enhancing parental involvement is critical in ensuring that adolescence are introduced to issues relating to their sexuality to make them informed decisions.

4.8 Type of school and sexual debut

Cross tabulation was run between type of school and ability for the respondents to delay sexual debut. This was conducted in order to tests for significance between the variables. Table 4.10 presents the results on information about types of school and ability to delay sexual debut.

Table 4.10: Cross tabulation of Type of school and delayed sexual debut

		Type of School				Persons Chi-square (df (2))
			Mixed		Total	
Outcome variable		**Girls Boarding**	**Girls Boarding and Day**	**Girls Day**		**2.015a**
Are you able to delay sex until you get married	No	75	55	91	221	Sig (2 sided)
	Yes	15	11	28	54	0.365
Total		**90**	**66**	**119**	**275**	

The results in table 4.10 shows that in girls boarding (75) of the respondents said they cannot delay their sexual debut while on 15 accepted to delay their sexual debut. In mixed

boarding 55 respondents said they cannot delay their sexual debut and only 11 accepted to delay their sexual debut and in girls boarding 91 girls said no to delaying their sexual debut while only 28 accepted to delay their sexual debut. Overall, majority of the respondents said 'no' across all types of schools while only 20% of the respondents accepted to delay their sexual debut.

Chi –square test was conducted to verify whether there was significance difference in response between the type of student's school and their willingness to delay their sexual debut. Statistical results **(**x^2(df)=2.015, n=275) (Assymp.sig=0.365). Because the Assymp.sig is greater than 0.05 and therefore we accept the null hypothesis since the result is not significant. The two variables are not independent of one another, type of school does not determine the outcome variable (delaying sexual debut).

4.8.1 Parental status with delaying sexual debut

The students were asked whether they could accept to delay their sexual debut and a cross tabulation was run to confirm whether there was statistical significance between parental statuses with student's willingness to adopt new behavior change of delaying their sexual debut. Table 4.11 represents the parental status and response on delaying sexual debut

Table 4.11: Parental status and response on delaying sexual debut

		Parental status					Persons Chi-square
		Partial orphan	Both Parent Alive	Complete Orphan	Adopted	Total	3.650[a] df (3)
Are you able to delay until you get married	**NO**	115	88	15	3	221	Asymp. Sig. (2-sided)
	YES	27	21	3	3	54	.324
Total		**142**	**109**	**18**	**6**	**275**	

a. 3 cells (37.5%) have expected count less than 5. The minimum expected count is 1.18.

b. Based on 275 sampled tables with starting seed 2000000.

c. The standardized statistic is .853.

The results showed that parental status, Statistical results **(**x^3(df)= 3.650[a] , n=275) (Assymp.sig=0.324). Because the Assymp.sig is greater than 0.05 and therefore we accept the null hypothesis since the result is not significant. The two variables are not independent of one another, parental status do not influence student's sexual behavior. This findings is contrary to other studies conducted by Noar (2008) who found that children with both parents and who come from a religious background tend to have good behaviors as opposed to single parents or orphaned children who also suffer from lack of parental love and acceptance in the society which forces them to be more aggressive in responding to many issues.

4.8.2 Gender and delaying sexual debut

Analysis was performed to establish whether gender characteristics influenced the outcome variable and the result presented in Table 4.12.

Table 4.12: Gender and delaying sexual debut

		Gender			Persons Chi-square	Point Probability
Outcome variable		**Male**	**Female**	**Total**	.556[a] df (1)	
Are you able to delay sex until you get married	No	90	131	221	Asymp.	.095
	Yes	19	35	54	Sig. (2- sided)	.456
Total		**109**	**166**	**275**		

a. 0 cells (0.0%) have expected count less than 5. The minimum expected count is 21.40.

b. Computed only for a 2x2 table

c. For 2x2 cross tabulation, exact results are provided instead of Monte Carlo results.

d. The standardized statistic is .745.

The results showed that parental status, Statistical results **(**x^1(df) = .556[a] n=275) (Assymp. sig=0.456). Because the Assymp. Sig. is greater than 0.05 and therefore we accept the null hypothesis since the result is not significant. The two variables are not independent of one another, gender do not influence how a student's sexual behavior. These findings is in contrast to a study by Odida (2012) who found that more girls tend to delay as opposed to boy child.

4.8.3 Age and Delaying sexual debut

Cross tabulation was also run between ages of the respondents which was a continuous variable with dichotomous outcome variable (delaying sexual debut). The results was presented in Table 4.13

Table 4.13: Age and delaying sexual debut

		Age of Respondents							
		13	**14**	**15**	**16**	**17**	**18**	**19**	**Total**
Are you able to delay									
sex until you get	No	2	45	82	44	25	18	5	221
married	Yes	1	18	16	8	4	6	1	54
Total		**3**	**63**	**98**	**52**	**29**	**24**	**6**	**275**

Table 4.13 shows that delaying sexual debut until marriage confirms previous research which indicated that most youth are not willing or able to delay their first sexual encounters. The students at age 15 years represented the highest number who said no at 82, followed by 14 years at 45, 16 years at 44, 17 years at 25. Those aged 18, 19 and 13 years were 18, 5 and 2 respectively.

CHAPTER FIVE

SUMMARY OF FINDINGS, CONCLUSION AND RECOMMEDATION

5.1 Introduction

This chapter summarizes the findings upon which conclusions and recommendations were drawn and the conclusions. The findings have been classified as per the variables contained in the literature review and the conceptual framework; Counselling and testing programs, youth promotion programs, health education programs and parental support programs and their influence on behavior change.

5.2 Summary of Findings

The summary of findings from the research study are as detailed here;

5.2.1 Counselling and testing programs and behavioral change among youths

The results showed that counselling and testing had a weak positive relationship to delaying sexual debut among secondary school going adolescents in Mbita Sub-county whereas rs = 0.045 and n= 275 and p> 0.05 p= 0.457 indicating lack of statistical significance between the variables. These could be deduced to mean that counselling and testing do influence but with a weaker impact of behavioral change of school going adolescents to be more conscious in adopting safe sex practices like the use of condoms or one partner. The odds of counselling and testing resulting to adolescent delaying their sexual debut was found to be Exp (B) = 1.881. Coefficient in the model for testing and counselling was found to be 0 .632X1 in the binary logistic equation. This means that in the model, counselling and testing are factors that influence sexual debut of the school going adolescences. Evidence

from previous studies had established that counselling and testing, promotion programs, health education and parental support positively influence adolescents in adopting behavioral change. Before this actual data was collected, a pilot test was conducted in another school within Kisumu Sub-county which was not part of the sample.

5.2.2 Youth promotion programs on behavioral change among youths

The study also examined if there was significant influence between youth promotion programs and sexual debut. The findings established that youth promotion programs had a negative impact on sexual behavior of the school going adolescents. The promotion programs had odds ratio of Exp (B) = 0.842 resulting to adolescent delaying their sexual debut. Spearman's rank correlation between delaying sexual debut and youth promotions was also found to be insignificant at P- values being greater than 0.05, p= 0.754 and rs being 0.022. The association between youth promotion programs and delaying sexual debut. This findings stress that youth promotions programs can acts as a conduit for school going adolescents to get bad behaviors instead of promoting their healthy interactions.

5.2.3 Health education programs and behavior change among youths

The results showed that counselling and testing had a weak positive relationship to delaying sexual debut among secondary school going adolescents in Mbita Sub-County whereas rs = 0.045 and n= 275 and p> 0.05 p= 0.457 indicating lack of statistical significance between the variables. Equally the study found that there was no statistical significant between youth promotion programs and the study outcome variable rs = 0.022 and n= 275 and p> 0.05 p= 0.715. However, there study found a positive strong association between parental

support programs and delaying sexual debut rs = 0.634 and n= 275 and p < 0.05 p= 0.027. The model was able to classify 80.4% cases who could not accept to delay their sexual debut. The odds ratio for gender indicates that when holding all other variables constant, a female is 1.724 times more to accept to delay as opposed to a man. The study also found negative association between health education programs and outcome variable rs = - 0.018, n = 275 and p> 0.05, p= 0.766.

5.2.4 Parental support programs on behavior change among youth

The odds ratio for parental support was found to be Exp (B) = 0.916 and Exp (B) =0 .392. Finally, the study found a negative weaker relationship between parental support and delaying sexual debut which was statistically significant at rs = 0.634 and n= 275 and p < 0.05 p= 0.027. Binary logistic regression analysis was employed to predict the probability that a participant would accept to delay her or his sexual debut. The predictor variable were counselling and testing (X1), promotion programs (X2), health education (X3), parental support (X4), and the covariate variables were gender and type of school under the categorical variable option in SPSS and these were treated as dummy variables.

5.3 Conclusion

Based on the findings of the study, it can be concluded that parental support through advice and parents acting as role model is all what adolescent require to have a positive behavior in their upbringing and adopt behavior change. This therefore means that any intervention of changing youth behavior should begin from parental guidance and empowerment so that parents as the head of family institution should play rightful role and to give to the society

the best children. This report is similar to other studies supporting upbringing of children as a critical component where children acquire life skills and good behaviors for their future development and growth.

5.4 Recommendations

Based on conclusion on all the four variables this study recommends that another study need to be conducted which covers a bigger area since this study was only done in six schools in Mbita, Homabay.

The study found a weak and negative association between testing and counselling and sexual debut. This means that testing and counselling to school going adolescents may only promote excitement when they get the news of being negative thus even engage in sex more. The study thus recommend the need to train adolescence the need for safe sex by using condoms and having one partner to reduce the rate of infection and reinfection.

The study also found a weak association between youth promotion programs and delaying their sexual debut. This means that youth promotion programs has less effect in changing their behavior. Therefore, concerning this variable this study recommends selective use of youth friendly programs which can change behavior

The study found a significant relationship between parental support and behavior change. This study therefore support argument that parents determine children character to a great extent and are useful during character and right behavior adoptions. Using the findings

from this study, behavior change programs should center on the parents empowerment and parents support since such programs have greater positive effects on children adopting behavior change. This findings also reinforces social learning theory by Albert Bandura in (1997). Parents are the first person for children to observe and use that to acquire a belief systems on how they will behave in future. Parents should act as role models and offer both external and internal reinforcement to influence behavior of their children. Reinforcement can be positive or negative, but the important factor is that it will usually lead to a change in a person's behavior.

During upbringing children need to be told and encouraged by parents to choose what is right and avoid what may endanger their lives and studies. This is a matter that need to be reinforced by the government and upbringing given due attention by all policy makers and the churches to transform behavior of our future generation. The findings from this study support literature reviews that parents are crucial for emotional and intellectual development of children. This study therefore will be used as a basis to support child centered interventions geared towards improving parental good skills as an important step of achieving good child development and mannerism.

5.5 Areas for Further Research

The study did not include the effect on moderating variables to parental support in influencing behavior. Therefore this study recommends another study to be done like moderating effects of religious affiliation on the relationship between parental support and behavior change.

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APPENDICES

APPENDIX I: LETTER OF TRANSMITAL

Denis Leakey Ojuok,

University of Nairobi,

P.O. Box 30197,

Nairobi.

Mobile Phone: 0727 575 661

E-Mail: dojuok2002@yahoo.com

Dear Sir/Madam,

RE: HIV/AIDS AWARENESS PROGRAMS ON BEHAVIOR CHANGE AMONG THE YOUTH IN PUBLIC SECONDARY SCHOOLS IN MBITA SUB COUNTY, HOMABAY COUNTY, KENYA

I am a Masters of Arts (Project Planning and Management) student at the University of Nairobi carrying out research on the above topic. It is my humble request that you assist me in filling in the Questionnaires/Interview schedule as correctly and honestly as possible. Be assured that your identity and responses will be treated with UTMOST CONFIDENTIALITY and for this reason DO NOT WRITE YOUR NAME on the questionnaire.

I take this opportunity to thank you for you accepting to participate in this work.

Yours faithfully

DENIS LEAKEY OJUOK

APPENDIX II: QUESTIONAIRE

Introduction statement

My name is Mr. / Mrs. / Miss. _____ administering this questionnaire on behalf of Mr. Denis Leakey Ojuok a Masters of Arts (Project Planning and Management) candidate at the University of Nairobi carrying out research on **"HIV/AIDS awareness and behavior change among youths in public secondary schools in Mbita Sub-county, Homabay County, Kenya"**. This research is intended to help the government / Development partners working with youths develop policies that can see HIV free future generation. Identity and responses will be treated with CONFIDENTIALITY and for this reason DO NOT WRITE YOUR NAME on the questionnaire. Feel free to add more information at the back of the paper.

Section (A): Demographic information of participants.

Instructions: Tick as appropriate.

1.0	Date of interview:		_____/_____/ 2018
1.1	Start time……		End time……..
1.2	Name of School:		
1.3		What is your age in years?	
1.4	Sex		Male [ ] Female [ ]
1.5	Type of school?		Boys boarding [ ] Girls boarding[ ] Mixed day [ ] Boys day [ ] Mixed day & Boarding[ ] Girls day [ ] Other (specify)_____
1.6	What is your occupation?		Teacher[ ] Student counselor [ ] Education officer [ ] Student [ ] Others. (Specify) _____
1.7	State your category in respect to family background as applicable(STUDENTS ONLY)		Both parents alive[ ] Partial orphan[ ] Complete orphan [ ] Adopted [ ] Other (Specify) _____

SECTION B:

A. Information on Counselling and testing

How important counselling and testing for HIV/Aids to you?

Very important (5)	Important (4)	Slightly important (3)	Least Important(2)	Not important at all(1)
☐	☐	☐	☐	☐

Using the scale shown below, rate your level of agreement (or disagreement) with respect to the following aspects of HIV/Aids counselling and testing to you. Use a tick (☑) to indicate your choice.

	Aspects	Strongly agree (5)	Agree (4)	Undecided (3)	Disagree (2)	Strongly Disagree (1)
HIV/Aids testing						
1	Knowledge of One's HIV Status is Empowering	☐	☐	☐	☐	☐
2	Testing help to curb the spread of HIV/Aids	☐	☐	☐	☐	☐
HIV/Aids Counselling						
3	Counselling services are useful in schools in reducing HIV/Aids programs	☐	☐	☐	☐	☐
4	I value peer counselling since we understand our needs better than if adults is doing it	☐	☐	☐	☐	☐
Spread of HIV/Aids						
5	Can you get HIV/Aids by blood transfusion?	☐	☐	☐	☐	☐
6	Can you get HIV/Aids through mosquito bites	☐	☐	☐	☐	☐
7	If a have unprotected sex and I take shower immediately I cannot get HIV/Aids	☐	☐	☐	☐	☐
Treatments						

8	Schools should be provided with timely and accessible HIV treatments	☐	☐	☐	☐	☐
9	There is no cure for HIV/Aids the drugs is to suppress the viral load	☐	☐	☐	☐	☐

B. Information on HIV/Aids promotion programs

How important is HIV/Aids promotion programs to you?

Very important (5)	**Important (4)**	**Slightly important (3)**	**Least Important (2)**	**Not important at all (1)**
☐	☐	☐	☐	☐

Using the scale shown below, rate your level of agreement (or disagreement) with respect to the following aspects of HIV/Aids promotion programs to you. Use a tick (☑) to indicate your choice.

	Aspects	**Strongly agree (5)**	**Agree (4)**	**Undecided (3)**	**Disagree (2)**	**Strongly Disagree (1)**
Youth clubs						
1	In clubs in the school we get training on HIV/Aids	☐	☐	☐	☐	☐
2	At the clubs we develop good characters on how to abstain from sex until we are marriage	☐	☐	☐	☐	☐
Sports activities						
3	The sporting events make us so busy and we have less time to idle which changes youth behavior	☐	☐	☐	☐	☐
4	Sports is part of making us grow healthy physically	☐	☐	☐	☐	☐

Church clubs						
5	At church clubs in the school we are properly trained on how to respect our bodies as the temple of God	☐	☐	☐	☐	☐
6	Teachings at the school church services has changed me	☐	☐	☐	☐	☐
Academic clubs						
8	Academic clubs are useful for passing to us information on HIV/Aids	☐	☐	☐	☐	☐
9	Academic clubs assist us acquire new perceptions on our health status	☐	☐	☐	☐	☐

C. Information on Health Education

How important is HIV/Aids health education program to you?

Very important (5)	**Important (4)**	**Slightly important (3)**	**Least Important (2)**	**Not important at all (1)**
☐	☐	☐	☐	☐

Using the scale shown below, rate your level of agreement (or disagreement) with respect to the following aspects of HIV/Aids education program. Use a tick (☑) to indicate your choice.

	Aspects	**Strongly agree (5)**	**Agree (4)**	**Undecided (3)**	**Disagree (2)**	**Strongly Disagree (1)**
Information education materials						
1	Printed pamphlets on HIV/Aids are the best	☐	☐	☐	☐	☐

	for passing information to the adolescents					
2	Healthy looking people are less likely to have HIV/Aids	☐	☐	☐	☐	☐
Mass media programs						
3	Radio programs are the best for teaching the youths on HIV/Aids	☐	☐	☐	☐	☐
4	Televisions programs are the best for teaching the youth on HIV/Aids	☐	☐	☐	☐	☐
Peer education						
5	Peer education is the best for passing HIV/Aids information	☐	☐	☐	☐	☐
6	Peer to peer education programs enhances youth participation.	☐	☐	☐	☐	☐
Internet education						
8	Social media through internet is the best for passing HIV/Aids information among the youth	☐	☐	☐	☐	☐
9	We can easily search for internet information on HIV/Aids once the school closes	☐	☐	☐	☐	☐

D. Information on parental support

How important is parental support to you in HIV/Aids related information?

Very important (5)	**Important (4)**	**Slightly important (3)**	**Least Important (2)**	**Not important at all (1)**
☐	☐	☐	☐	☐

Using the scale shown below, rate your level of agreement (or disagreement) with respect to the following aspects of parental support to you. Use a tick (☑) to indicate your choice.

	Aspects	**Strongly agree (5)**	**Agree (4)**	**Undecided (3)**	**Disagree (2)**	**Strongly Disagree (1)**
Parental education						
1	My parents taught me about HIV/Aids	☐	☐	☐	☐	☐
2	my parents shared with me vital lessons on how to live responsibly and avoid HIV/Aids	☐	☐	☐	☐	☐
Role models						
3	My parents have both acted as role models to me to live responsibly and avoid getting HIV/Aids	☐	☐	☐	☐	☐
4	I have leant how to deny myself today for my bright future from my parents	☐	☐	☐	☐	☐
Parental provision						
5	My parents have adequately provided for me	☐	☐	☐	☐	☐
6	My parents have provided me with moral support to live as responsible child	☐	☐	☐	☐	☐
Sponsorship						
7	My parents have paid for me to attend seminars on HIV/Aids	☐	☐	☐	☐	☐
8	My parents have purchased for me some books on HIV/Aids	☐	☐	☐	☐	☐

E. State the level of agreement or disagreement with the following statement on measuring HIV/Aids behavior

	Aspects	Strongly agree (5)	Agree (4)	Undecided (3)	Disagree (2)	Strongly Disagree (1)
Measurement of behavior						
1	Delaying my sexual debut is not easy	☐	☐	☐	☐	☐
2	When having sex I agree to use condoms always until one day when I get married	☐	☐	☐	☐	☐
3	I can maintain one partner to avoid getting HIV/Aids	☐	☐	☐	☐	☐
4	When having sex I would rather have sex with a healthy looking person than a thin one	☐	☐	☐	☐	☐

SECTION C:

I. To improve counselling services to the youth what can you suggest need to be done?

a. ……

II. What suggestions can you make to your clubs to help promote behavior change among the youths in the school?

a. ……

……

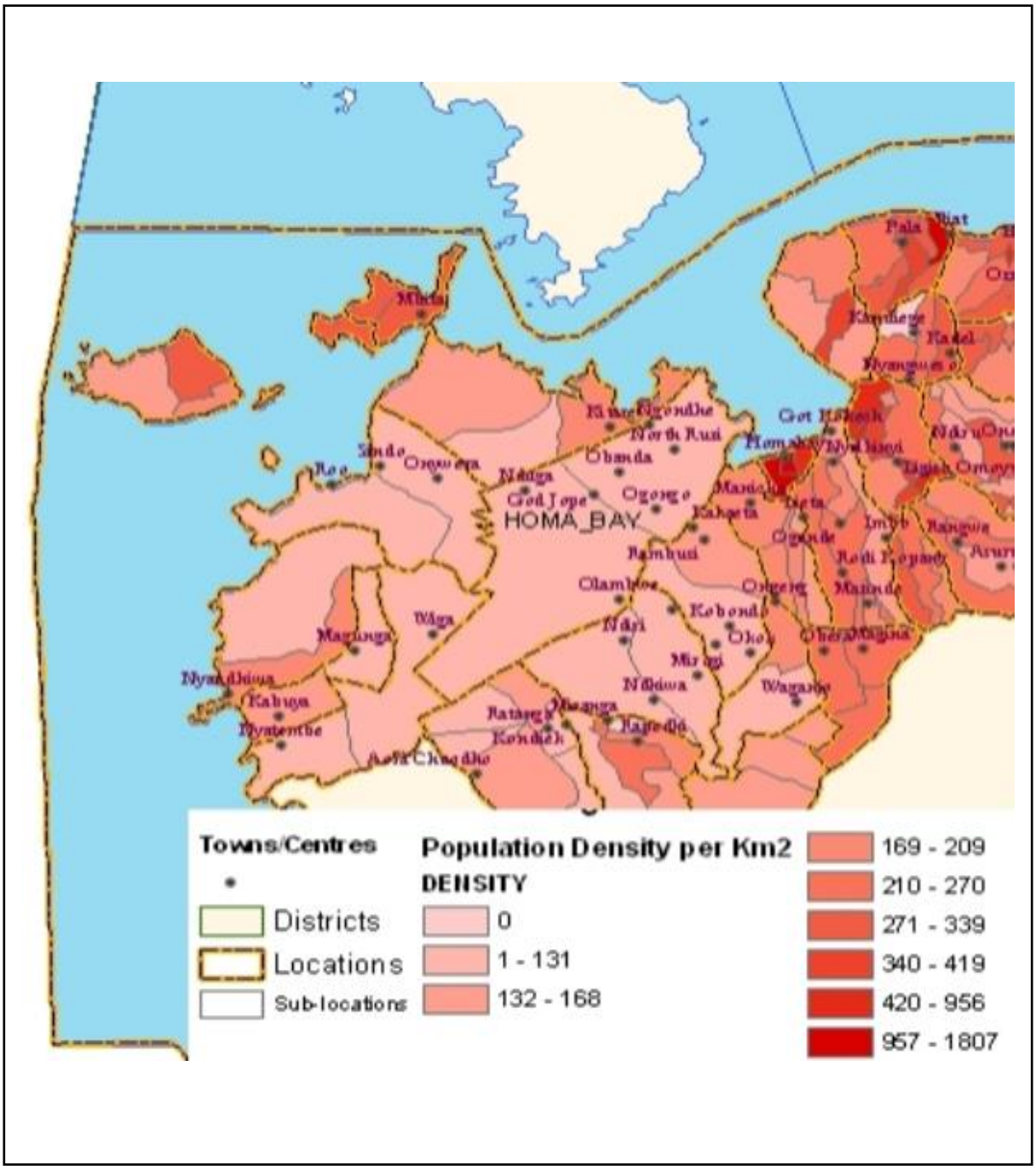
III. What do you think should be done to make health education friendlier to you?

a. ……

IV. What are some of the things you have done because your parents have not been providing for you enough pocket money that you can regret

……

APPENDIX III: MAP OF MBITA DISTRICT



(Google map, 2017)

APPENDIX IV: UNICEF – KENYAN STATISTICS 2011

HIV/AIDS	
Estimated adult HIV prevalence rate (aged 15-49), 2009	6.3
Estimated number of people (all ages) living with HIV, 2009	1500
Estimated number of people (all ages) living with HIV, 2009 (thousands), low estimate	1300
Estimated number of people (all ages) living with HIV, 2009 (thousands), high estimate	1600
Mother-to-child transmission, Estimated number of women (aged 15+) living with HIV, 2009 (thousands)	760
Pediatric infections, Estimated number of children (aged 0-14) living with HIV, 2009 (thousands)	180
Prevention among young people, HIV prevalence among young people (aged 15-24), 2009, total	2.9
Prevention among young people, HIV prevalence among young people (aged 15-24), 2009, male	1.8
Prevention among young people, HIV prevalence among young people (aged 15-24), 2009, female	4.1
Prevention among young people, % who have comprehensive knowledge of HIV, 2005-2009*, male	55
Prevention among young people, % who have comprehensive knowledge of HIV, 2005-2009*, female	48
Prevention among young people, % who used condom at last higher-risk sex, 2005-2009*, male	64
Prevention among young people, % who used condom at last higher-risk sex, 2005-2009*, female	40
Orphans, Children (aged 0-17) orphaned by AIDS, 2009, estimate (thousands)	1200
Orphans, Children (aged 0-17) orphaned due to all causes, 2009, estimate (thousands)	2600
Orphan school attendance ratio, 2005-2009*	

APPENDIX V: REGIONAL HIV PREVALENCE AMONG YOUTHS

Country	HIV prevalence (%) among young people (15-24 years old)		**% of young people (15-24 years old) have comprehensive knowledge of HIV**	
	Male	Female	Male	Female
Angola	0.6	1.6	-	-
Botswana	5.2	11.8	-	-
Burundi	1.0	2.1	-	30
Comoros	<0.1	<0.1	-	-
Eritrea	0.2	0.4	-	-
Ethiopia	-	-	33	20
Kenya	1.8	4.1	55	48
Lesotho	5.4	14.2	-	-
Madagascar	0.1	0.1	-	-
Malawi	3.1	0.1	-	-
Mozambique	3.1	8.6	-	14
Namibia	2.3	5.8	62	65
Rwanda	1.3	1.9	54	51
Somalia	0.4	0.6	-	4
South Africa	4.5	13.6	-	-
Swaziland	6.5	15.6	52	52
Uganda	2.3	4.8	38	32
Tanzania (United)	1.7	3.9	42	39
Zambia	4.2	8.9	41	38
Zimbabwe	3.3	6.9	-	53

Source: Opportunity in crisis: Preventing HIV from early adolescence to early childhood, UNICEF, 2011

APPENDIX VI: RESEARCH PERMIT

UNIVERSITY OF NAIROBI
OPEN, DISTANCE AND e-LEARNING CAMPUS
SCHOOL OF OPEN & DISTANCE LEARNING
KISUMU CAMPUS

The Secretary
National Council for Science and Technology
P.O Box 30623-00100
NAIROBI, KENYA

7th August, 2018

Dear Sir/Madam,

RE: DENIS LEAKEY OJUOK - REG NO: L50/72674/2008

This is to inform you that **Denis Leakey Ojuok**named above is a student in the University of Nairobi, Open, Distance and e-learning centre, School of Open and Distance learning, Kisumu Campus.

The purpose of this letter is to inform you that **Denis** has successfully completed his **Masters**course work and Examinations in the programme, has developed Research Proposal and submitted before the School Board of Examiners which he successfully defended and made corrections as required by the School Board of Examiners.

The research title approved by the School Board of Examiners is: ***"HIV/AIDS Awareness and Behavior Change Among Youth in Public Secondary Schools in Mbita Sub County, Homabay County, Kenya".*** The Project is part of the pre-requisite of the course and therefore we would appreciate if the student is issued with a research permit to enable him collect data and write a report. Research project reflect integration of practice and demonstrate writing skills and publishing ability. It also demonstrates the learners' readiness to advance knowledge and practice in the world of business.

We hope to receive positive response so that the student can move to the field to collect data as soon as he gets the permit.

Yours Faithfully

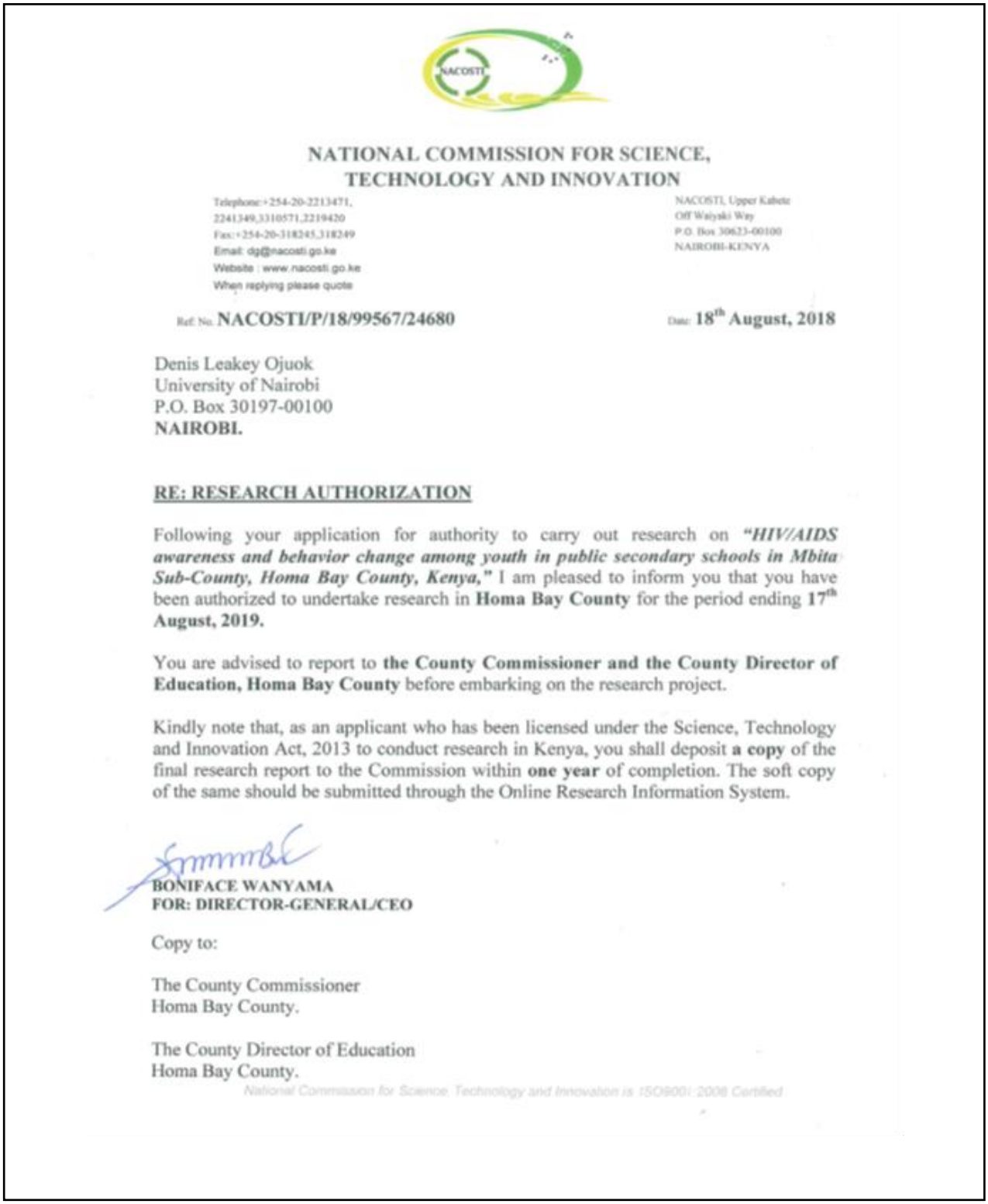
CO-ORDINATOR
SCDE – KISUMU CAMPUS
07 AUG 2018
P. O. Box 825 – 40100,
KISUMU

Dr. Stephen Okelo, PhD
COORDINATOR ODeL
KISUMU CAMPUS

Cc: file copy

ISO 9001: 2015 CERTIFIED
The Fountain of Knowledge Providing Leadership in Academic Excellence

APPENDIX VII: NACOSTI RESEARCH AUTHORIZATION



NATIONAL COMMISSION FOR SCIENCE,
TECHNOLOGY AND INNOVATION

Telephone:+254-20-2213471,
2241349,3310571,2219420
Fax:+254-20-318245,318249
Email: dg@nacosti.go.ke
Website : www.nacosti.go.ke
When replying please quote

NACOSTI, Upper Kabete
Off Waiyaki Way
P.O. Box 30623-00100
NAIROBI-KENYA

Ref: No. **NACOSTI/P/18/99567/24680**

Date: **18th August, 2018**

Denis Leakey Ojuok
University of Nairobi
P.O. Box 30197-00100
NAIROBI.

RE: RESEARCH AUTHORIZATION

Following your application for authority to carry out research on ***"HIV/AIDS awareness and behavior change among youth in public secondary schools in Mbita Sub-County, Homa Bay County, Kenya,"*** I am pleased to inform you that you have been authorized to undertake research in **Homa Bay County** for the period ending **17th August, 2019.**

You are advised to report to **the County Commissioner and the County Director of Education, Homa Bay County** before embarking on the research project.

Kindly note that, as an applicant who has been licensed under the Science, Technology and Innovation Act, 2013 to conduct research in Kenya, you shall deposit **a copy** of the final research report to the Commission within **one year** of completion. The soft copy of the same should be submitted through the Online Research Information System.

BONIFACE WANYAMA
FOR: DIRECTOR-GENERAL/CEO

Copy to:

The County Commissioner
Homa Bay County.

The County Director of Education
Homa Bay County.

National Commission for Science, Technology and Innovation is ISO9001: 2008 Certified

APPENDIX VII: NACOSTI PERMIT

THIS IS TO CERTIFY THAT:
MR. DENIS LEAKEY OJUOK
of UNIVERSITY OF NAIROBI, 0-40300
Migori,has been permitted to conduct
research in *Homabay County*

on the topic: *HIV/AIDS AWARENESS AND BEHAVIOR CHANGE AMONG YOUTH IN PUBLIC SECONDARY SCHOOLS IN MBITA SUB-COUNTY, HOMABAY COUNTY, KENYA.*

for the period ending:
17th August,2019

Permit No : NACOSTI/P/18/99567/24680
Date Of Issue : 18th August,2018
Fee Recieved :Ksh 1000

.....
Applicant's Signature

.....
Director General
National Commission for Science, Technology & Innovation

CONDITIONS

1. The License is valid for the proposed research, research site specified period.
2. Both the Licence and any rights thereunder are non-transferable.
3. Upon request of the Commission, the Licensee shall submit a progress report.
4. The Licensee shall report to the County Director of Education and County Governor in the area of research before commencement of the research.
5. Excavation, filming and collection of specimens are subject to further permissions from relevant Government agencies.
6. This Licence does not give authority to transfer research materials.
7. The Licensee shall submit two (2) hard copies and upload a soft copy of their final report.
8. The Commission reserves the right to modify the conditions of this Licence including its cancellation without prior notice.

REPUBLIC OF KENYA

National Commission for Science, Technology and Innovation

RESEARCH CLEARANCE PERMIT

Serial No.A 20187

CONDITIONS: see back page

APPENDIX IX: MINISTRY OF EDUCATION AUTHORIZATION

MINISTRY OF EDUCATION

STATE DEPARTMENT OF BASIC EDUCATION

Telegrams: "SCHOOLING" Homa Bay
Telephone + 254722767574
When replying please quote
cdehomabay@gmail.com

COUNTY DIRECTOR OF EDUCATION
HOMA BAY COUNTY
P.O BOX 710
HOMA BAY
DATE: 4th SEPTEMBER, 2018

REF: MOE/CDE/HBC/ADM/11/VOL.II/92

DENIS LEAKEY OJUOK
NAIROBI UNIVERSITY

RE: RESEARCH AUTHORIZATION.

In response to the letter from the National Commission for Science, Technology and Innovation dated 4th January, 2018, giving you authority to carry out the research on "***HIV/AIDS Awareness and Behavior Change among Youth in Public Secondary Schools in Mbita Sub County, Homa Bay County"*** I hereby give you permission to carry out the research in **Homa Bay County** for the period ending **17th August, 2019.**

Please submit a copy of your findings both in soft and hard copies to us.

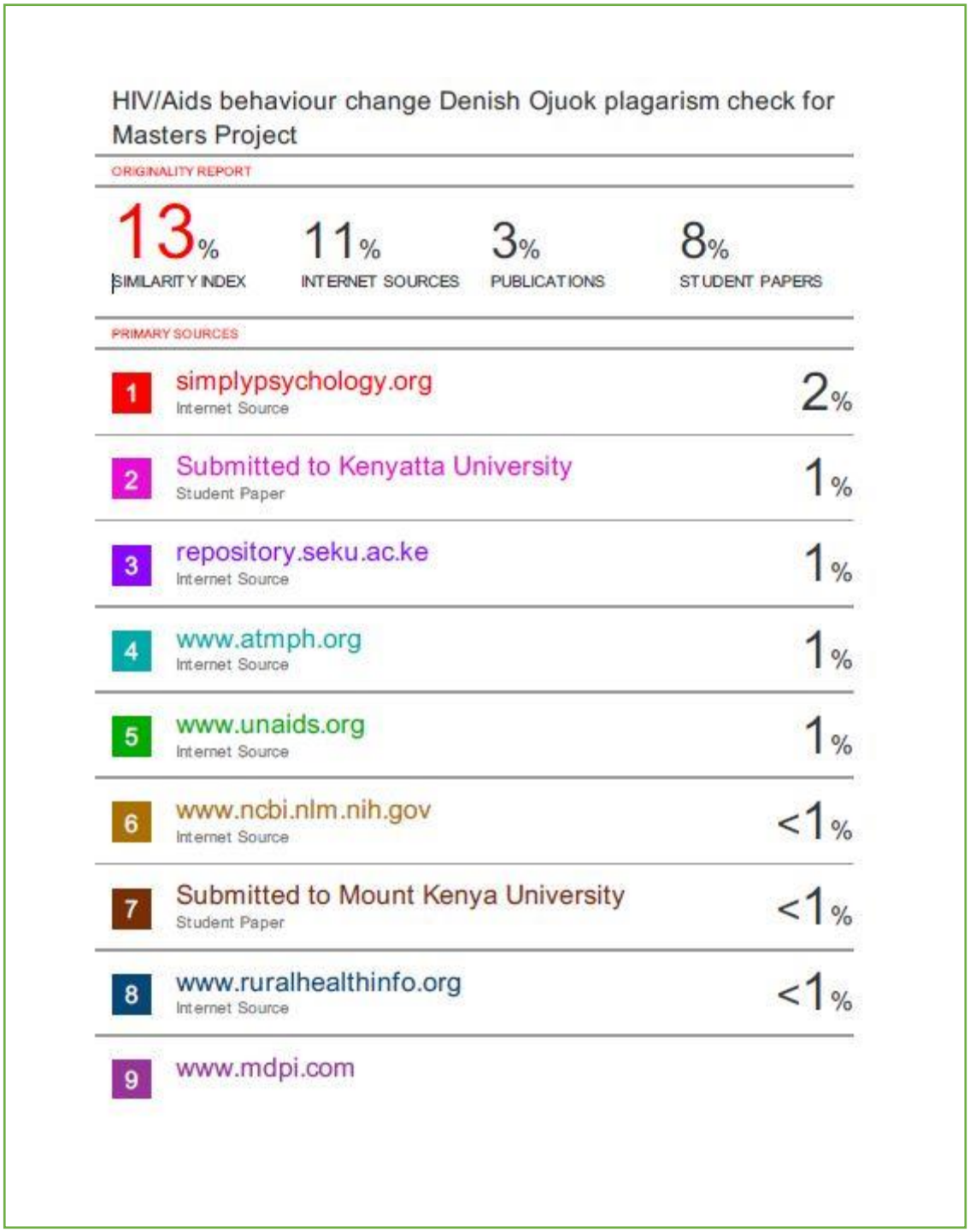
COUNTY DIRECTOR OF EDUCATION
HOMA BAY COUNTY
P. O. Box 710 - 40300, HOMA BAY
Email: cdehomabay@gmail.com

SHEM OMBONYO
FOR: COUNTY DIRECTOR OF EDUCATION
HOMA BAY COUNTY.

Cc

1. **County Commissioner**
   Homa Bay County

APPENDIX X: PLAGERISM REPORT



HIV/Aids behaviour change Denish Ojuok plagarism check for Masters Project

ORIGINALITY REPORT

13%	11%	3%	8%
SIMILARITY INDEX	INTERNET SOURCES	PUBLICATIONS	STUDENT PAPERS

PRIMARY SOURCES

1	simplypsychology.org Internet Source	2%
2	Submitted to Kenyatta University Student Paper	1%
3	repository.seku.ac.ke Internet Source	1%
4	www.atmph.org Internet Source	1%
5	www.unaids.org Internet Source	1%
6	www.ncbi.nlm.nih.gov Internet Source	<1%
7	Submitted to Mount Kenya University Student Paper	<1%
8	www.ruralhealthinfo.org Internet Source	<1%
9	www.mdpi.com	

	Internet Source	<1%
10	Wei Zhou, Luo Ze. "Job Market-Oriented Learning Evaluation Framework", 2008 International Conference on Computer Science and Software Engineering, 2008 Publication	<1%
11	Submitted to University of Nairobi Student Paper	<1%
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